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DECEMBER 1981

Indiana Business Review

1982
Business Outlook

INDIANA UNIVERSITY
School of Business / Division of Research

INDIANA BUSINESS REVIEW
VOLUME 56
DECEMBER 1981

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Indiana Business Review (U. S. P. S. Pub. No. 261780) is published bimonthly, in February, April, June, August, October and December, by the Division of Research, School of Business, Indiana University, Bloomington and Indianapolis. The Division of Research is a member of the Association for University Business and Economic Research (AUBER).

Second class postage is paid at Bloomington, IN 47405. Subscriptions are available to Indiana residents without charge.

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1982 BUSINESS OUTLOOK—A MESSAGE FROM THE DEAN

The business news reaching our homes and offices these days continues to confirm a national recession. For purposes of business planning the major question is, When will the recovery commence? The Outlook offered in this issue of the *Indiana Business Review* suggests that recovery will be in progress during the summer of 1982. The timing of such events is always uncertain, but the necessary forces seem to fall in place with the consumer leading the way as the year progresses.

Once again we are pleased to offer the Business Outlook for the coming year to our friends across the state and the nation. Each year we visit selected major communities in the state to share our views with members of the business community in twelve cities, and we record a televised version of the presentation for statewide distribution. This outreach effort provides us with opportunities to hear from business leaders about local and industry conditions. The Outlook presented in these pages reflects that interaction.

During 1982 the flow of business news should improve. We extend to each of you our best wishes for the coming year.

Schuyler F. Otteson, Dean
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The National Economy

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INTRODUCTION

As recently as two months ago, the general-consensus forecast of business economists was for reasonably good growth in 1982 and beyond, with real output expected to increase at about 3.4% next year. The second half growth rate of 3.5% was expected to be a slight improvement in the 3.1% growth expected for the first half of 1982.

However, it is increasingly clear that the U.S. economy is in a recession that will continue at least through the first half of 1982.

The current recession began in the second quarter of 1981, when the rate of growth of real output declined by a seasonally adjusted annual rate of −1.6%. The preliminary figures for third quarter 1981 growth came in at −0.6% (later revised to +0.6%). For both of these quarters, the decline was mostly limited to the automobile and housing sectors, both of which were buffeted by tight money. However, the economy began to drop like a stone in the fourth quarter, and preliminary estimates are that growth may be a negative 5% to 9% annual rate for the fourth quarter of 1981.

How can there be a recession if a recession requires two consecutive quarters of negative growth and the third quarter of 1981 was found to be positive? The answer is simple. On November 19, the Commerce Department revised the third quarter growth figures for the U.S. from −0.6% to +0.6%. Although this would appear to be an optimistic revision, possibly indicating that the U.S. is not yet in a recession, it is a pessimistic change. It reflects the fact that there was an additional $3.7 billion in investment than was indicated by the earlier figures. This investment was almost all unintended investment, reflecting an additional $3.7 billion buildup in unwanted inventories in the third quarter. In view of the weak sales so far in the fourth quarter, it will be difficult to run off these unwanted inventories until late 1982.

The 1981-1982 recession will be about five quarters long, running from 1981:2 through 1982:2. The third quarter of next year will be flat, and positive growth will take place in the fourth quarter. The softening in the economy that began in the second quarter of 1981 and will continue through the first half of 1982 will

* This forecast was prepared by Professor Brady, with comments provided by Professors R. Jeffery Green, David D. Martin and George W. Wilson.

bring about a slight decline in the rate of inflation and in short-term interest rates. As tangible results of the administration's supply-side policies begin to show visible effects on the financial markets, interest rates will soften through the latter part of 1981 and over the first half of 1982.

There are ten major reasons why the U.S. economy is now in the middle stages of its eighth post-World War II recession. Together, they paint a rather bleak picture over the next three or four quarters, but will lead to a stronger economy as we enter 1983.

1. The real rate of interest, which was negative (to the extent that the rate of inflation exceeded the 91-day bill rate) for almost the entire interval between 1972 and 1980, turned positive with a vengeance in 1980. After reaching a whopping 5½%, it is currently in the neighborhood of 4%. This has had a disastrous short-term effect on households and businesses alike.

2. Two major sectors of the economy, autos and housing, continue to slump, with no turnabout visible in the near future.

3. Most economists consider that spending by consumers is influenced strongly by their wealth positions. Declining wealth as a result of falling securities and housing markets will impact upon consumption over the coming quarters. Investors have lost over $300 billion in the bond market and about $250 billion in the stock market between April and October of 1981. This is the biggest drop in seven years, and it is comparable to the declines in asset positions that took place in 1969-1970 and in 1974-1975. We all know what happened during those intervals. *Business Week* estimates that $2 *trillion* in paper values has disappeared in the stock, bond, real estate and commodities markets in the first three quarters of 1981. If past consumption patterns hold, we can expect consumption spending to decline in real terms early in 1982. Since consumption amounts to about two-thirds of gross national product, this is an important reason for expecting recession between 1981:2 and 1982:2.

4. Starting October 1 of this year, there were substantial cutbacks in transfer-payment income in the areas of food stamps, student loans, CETA, etc. This will continue to reduce the incomes of some of our lower income groups in the year ahead.

5. Taxes are going up, not down, next year. The Reagan tax cut is simply an approximation of indexing real tax payments to real output, and social security taxes take another substantial increase on January 1, 1982.

6. Farm income will continue to be down sharply during 1982. Net incomes of farmers (in current dollars) fell from $35 billion in 1979 to $20 billion in 1980! Farm income will remain roughly at the 1980 level throughout 1981, which implies a real income drop equal to the rate of inflation. The outlook for 1982 is not much better. The big crops of 1981, coupled with the declines in support prices that are currently being implemented by the Reagan administration, will lead to a weak agricultural sector throughout 1982. Tight money also has a negative impact on farmers.

7. The trade balance, which was positive for the first half of 1981, will turn strongly negative in 1982 and 1983 as a delayed result of the surge of the U.S. dollar relative to other major currencies that took place in 1981. Since real income counts exports as a positive item and imports as a negative item, the deteriorating trade balance will add to the softness in the domestic economy.

8. For those of a monetarist persuasion, the tight money policies of the Federal Reserve between January and September of 1981 spell softness ahead for the economy in 1982. Monetarists generally argue that real economic activity lags the level of monetary stringency by three or four quarters. From the fourth quarter of 1980 through September 1981, M1B (the basic money supply) grew at only a 1.7% rate, considerably below the Federal Reserve target

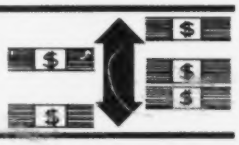
rate of 3.5% to 6%. Between April 1981 and July 1981, M1B actually declined at a 6% annual rate! This signals weakness in the economy at least through the second quarter of 1982.

9. One usual sign of recession is an inventory buildup, as firms find they are unable to sell all that they have produced. The revised estimates for the second and third quarters of 1981 show that output (GNP) amounted to considerably less than sales. Thus, inventories rose rather sharply in the second and third quarters, resulting in some expected future softness.

10. State and local government spending will decline in real terms in 1982 for the first time in over a decade. The real growth in state and local government spending averaged 2.5% over the last ten years, but is expected to decline by 1% in 1982. Since state and local government spending is 67% larger than federal government spending, amounting to about 12% of total gross national product, it will add further softness to the economy in 1982.

All of these factors noted above indicate that the U.S. economy is about midway through the 1981-1982 recession as 1981 comes to a close.

INTEREST RATES AND CREDIT



Back in 1978, we argued that there would be no recession in 1979 because, among other factors, the real rate of interest was negative, to the extent that the rate of inflation was higher than the long-term money rate of interest. If tax considerations were included, the real rate was even more negative, since interest payments are tax deductible. This negative real rate of return was quite abnormal, since the real rate of interest has averaged a positive 2.5% to 3.5% historically over the last hundred years or so. The shift of the real rate of interest from negative to positive in 1981 is one of our major reasons for an outlook of negative real growth in 1982. The real rate of interest is now much more positive than its historical norm, with short- and long-term money rates of interest in the neighborhood of 13% to 16% in the face of a declining single-digit rate of inflation. The current presence of high nominal interest rates together with moderating inflation has both the administration and business economists puzzled. Various explanations for an unusually high real rate of interest have been given over the last few months. Among them are the following:

1. One of the most widespread explanations is that the markets don't believe that the administration will get the federal budget under control. The official administration budget called for a fiscal year 1982 deficit of $42.5 billion, but many business economists feel that the combination of the administration's tax cuts and higher defense spending will produce much larger (about double) deficits than the official budget assumes.

2. Many economic observers feel that the Federal Reserve won't stick to a tight money policy if it appears that the recession will continue into 1982. Inflation-adjusted gross national product is expected to decline at a seasonally adjusted annual rate of 6% to 9% in the fourth quarter of 1981, and if negative growth continues into 1982, these observers feel that the Fed will fail to exercise continued monetary restraint. Higher anticipated rates of inflation later in 1982 will lead to higher money rates of interest, and the current high real rate of interest is a reflection of continued higher anticipated rates of inflation as the economy recovers in late 1982.

3. The whole concept of "supply-side" economics is coming under fire, with an increasing number of economic practitioners

having mixed feelings about the ability of the administration to achieve its economic targets. The expression "voodoo economics" is again creeping up in financial articles and editorials, aided by David Stockman's revelations in the *Atlantic.* To the extent that expectations about the result of current supply-side policies become more negative with regard to their chances of success, these expectations show up in higher nominal interest rates.

4. We will have to finance the higher budget deficits somehow, and many observers feel that any method of financing them is inflationary. If the Treasury sells the bonds financing the deficit to the Federal Reserve, then the deficit is monetized, and is paid for by creating new money, which is highly inflationary. On the other hand, if the Treasury sells the bonds to the private sector, it substitutes public spending for private spending. Since government spending is less likely than private spending to increase the supply of goods and services that the private sector can buy, the net result of the budget is inflationary. Expectations of higher inflation from deficit federal government budgets cause nominal interest rates to rise.

5. Both short-term and long-term interest rates have become more erratic since the Federal Reserve shifted from a policy of interest-rate watching to monetary-growth watching in October 1979. The variation in interest rates since October 1979 is approximately 3½ times as great as it was before that time. The higher risk associated with holding debt capital requires a larger return to induce bondholders to hold their bonds. The huge losses suffered by bondholders in 1981 have forced nominal interest rates upward.

6. Some analysts attribute the divergence of the real rate from its "normal" 3% or so to the devastating effect of income taxes on rates of return. The historical 2.5% to 3.5% real rates of return before 1965 existed when the U.S. economy was subjected to relatively low rates of inflation (less than 5% or so). Since inflation causes tax-bracket creep, a 3% real return before taxes would amount to only 1.5% real return to a household or firm in the 50% marginal tax bracket. Borrowers' insistence on a 3% real rate of return after taxes drives the before-tax real rate well above that figure.

7. Milton Friedman believes that the high real rate of interest is quite unexplainable, and that it represents a temporary "bubble" that will soon dissipate. In his view, it is quite comparable to the –4.5% real rates that occurred in 1973 and again in 1979. In Friedman's view, over the longer run, either nominal rates must fall or the rate of inflation must increase. Nominal rates declined rapidly in the fourth quarter of 1981.

To these explanations let us add still another. The structure of the money and capital markets has been changed profoundly by the Financial Reform Act of 1980, and by financial innovations in those markets. Before January 1, 1981, interest could not be paid on demand deposits, and the demand deposit component of the money supply controlled by the Federal Reserve was the major part of the money supply; changes in interest rates had little effect upon the growth of the money supply. However, since that time, an increasing component of the money supply has been affected by changes in interest rates. For example, at the end of 1980, money market funds in the U.S. amounted to $75.9 billion. So far in 1981, they have more than doubled in size and are now in excess of $180 billion. Over the last few months, these funds have been paying rates of return of about 16% per year. Sixteen percent of $180 billion amounts to a $28.8 billion per year increase in the broadly defined money supply (M2) due to interest accumulations alone. If nobody put a single dollar of new capital into money market funds, they would grow at a rate of 16% per year, far in excess of the rate of growth targeted for M2 by the Federal Reserve System. It is no wonder that the current statistics indicate that M1 (currency and demand deposits) is growing too slow and M2 is growing too fast. M2 includes

not only money market funds but overnight repurchase agreements, which are receiving interest returns comparable to those earned on money market funds.

What does the Federal Reserve do when money growth rates exceed their targets? They tighten up on money supply growth, driving up money rates of interest, and allowing the *existing* stock of repos and money market funds to grow at a *higher* rate. These higher growth rates of M2 cause the Fed to become more restrictive, driving up interest rates and allowing the existing stock of M2 to grow even more rapidly. A policy by the Federal Reserve of setting growth targets for M1A, M1B and M2 will continue to increase the disparity between M1A and M2, unless the Fed sets a sufficiently higher target for M2 than for M1A and M1B that the growth of M2 through interest accumulations can be accounted for.

There are a lot of other problems with the divisions of the money supply between M1A, M1B and M2 that are going to make things interesting for the Fed in 1982. It is estimated that about $100 billion will flow into the All Savers certificates between October 1, 1981 and December 31, 1982. If some of this money comes out of demand deposits and other checkable deposits at financial intermediaries, there will be a big shift from M1B to M2, messing up the Fed's targets for these two measures of the money supply and throwing the "Fed Watchers" off base.

At the time this outlook is being written,* short-term interest rates are in the process of falling sharply. The average federal funds rate had declined from an average rate of 19.10% for May of this year to 12% as of November 24, 1981. Similar decreases have taken place for 91-day bills and for other short rates, and the prime has declined from 20.5% to 16%. Short-term rates are currently being influenced partly by Federal Reserve actions, but mostly by the softness of the economy. The rate of growth of M1B has been well below the 3.5% to 6% target range, at 1.7% so far this year, so that the Fed must expand the money supply to get within its targets. The continued softening of the economy will also influence the Fed to be more permissive with respect to monetary expansion.

Our expectation is that the yield curve will again become normally (positively) sloped for the rest of 1981 and for the first three quarters of 1982. Long-term rates of interest will continue to come down somewhat. However, two major factors will keep long-term rates from coming down substantially. First, federal government borrowing will be greater in 1982 than in 1981, and a rough guess that the government's funding needs will be about twice the "official" $42.5 billion deficit won't be too far off the mark. This will tend to crowd out private-sector borrowing, and keep long-term interest rates high. In addition, there are substantial corporate debt issues backlogged, waiting for slightly lower rates to come into the market. The amount of short-term commercial debt outstanding is now in the neighborhood of $450 billion, and firms don't like to make long-term capital expansion outlays financed by short-term loans. Both the government and private sectors will keep the supply of long-term debt capital high next year, insuring that long-term interest rates will not fall very much in 1982.

The weakness that we expect in the economy next year will somewhat offset the strong demand for funds. A softening in the real level of economic activity next year will continue to cut private borrowing needs. Of course, the good news is that a decline in real output next year will bring down the rate of inflation somewhat. This should lead to reduced inflationary expectations and have a slight depressing effect on both long-term and short-term interest rates.

In summary, we expect that the yield curve will shift from the "credit-crunch" negative slope that it had for most of 1981 to a more

*The week of November 22, 1981.

normal positive slope for almost all of 1982. In addition, the yield curve should shift downward about 100 basis points over the first half of 1982 as the economy softens. This means short-term rates in the neighborhood of 10% to 12% and long-term rates running about 13% to 16%.

GOVERNMENT

The federal budget of the administration has projected a deficit of $42.5 billion, which most economists agree is far smaller than the deficit they expect. Table 1 shows the official administration budget for fiscal years 1982 through 1985. Where, in the administration estimates, does the underestimation of the deficit come from that conforms to the President's promise to balance the budget by 1984? Most analysts agree that the budget rests on assumptions that underestimate the rate of inflation and overestimate the real rate of growth of the economy over the coming few years.

Table 1
ADMINISTRATION BUDGET
(billions of dollars)

	1982	*1983*	*1984*	*1985*
Receipts	662.3	706.1	760.1	832.5
Spending	704.8	728.7	758.5	834.6
Deficit	–42.5	–22.6	+1.6	–2.1

Table 2 gives the administration's estimates for inflation, real growth, and interest rates between 1982 and 1985. These are highly optimistic expectations in almost anybody's book. Real growth is quite a bit higher than most economists expect, and inflation is lower than most business economists' projections. The major errors in these budget projections, in our opinion, are related both to government spending and to anticipated tax receipts. It is unlikely that the government will collect $662 billion in taxes next year, since their tax receipt projections are based on a 5.2% positive real rate of growth. Since we project negative real growth for the economy for most of next year, we expect the tax take of the government to be somewhat lower than $662 billion. However, there is a partially offsetting underestimate of tax revenue in the underestimation of the inflation rate, since with the administration's anticipated 6.2% rate of inflation next year there will be less tax-bracket creep than there would be with a more realistic 8% anticipated rate of inflation. If our interest rate projections are correct, and if short-term interest rates remain in the neighborhood of 10% to 12% or so, then the 1% underestimation of short rates by the administration will translate into an underestimation of about $10 billion in interest charges on the national debt. The administration is attempting to curb off-budget borrowing as well as on-budget spending. To the extent that they are successful, we can probably expect the total deficit to be in the neighborhood of $150 billion next year, a little more than triple the official administration forecast for the on-budget deficit.

Table 2
INFLATION, REAL GROWTH, INTEREST RATES
(percent)

	1982	*1983*	*1984*	*1985*
Real Growth	5.2	4.6	4.4	4.2
Inflation (as measured by the CPI)	6.2	5.6	4.8	4.5
Average rate of interest	10.5	7.5	6.8	6.0

Most people think of the federal government deficit as the difference between what

the government takes in taxes and what it spends as noted in the federal budget. However, the pattern of deficits as given by the budget is far from the complete picture. On-budget borrowing amounts to less than half of the total amount of government spending. The rest of it is off-budget. For example, in fiscal year 1981 on-budget borrowing amounted to a little less than $60 billion, but off-budget borrowing rose about 40% from what it had been the year before, so that the total of off-budget and on-budget borrowing came to $156.9 billion. Nearly $100 billion of the total government deficit was the result of off-budget borrowing!

What makes up this off-budget borrowing? It shows up in three major areas: direct loans, sponsored agency obligations, and guaranteed obligations. Together, these three kinds of off-budget borrowing soaked up about a fifth of all the credit in the U.S. capital market in 1981. Direct loans include those made to such borrowers as Chrysler and the City of New York. Guaranteed and sponsored agency obligations are largely made to the housing sector of the economy and are channeled through FNMA, GNMA, the Federal Home Loan Bank System, and Freddie-Mac (the Federal Home Loan Mortgage Corporation). This "back-door" spending of the federal government may be sneaky, to the extent that it does not receive the degree of attention that on-budget spending does, but it does compete for funds with other spending activities on a dollar-for-dollar basis. The Reagan administration has been attempting to curtail off-budget borrowing as well as the more publicized on-budget cuts. We are well aware of the $1 billion cut in welfare payments, the $1.3 billion cuts in food stamp outlays, and the $6 billion decline in CETA and job training programs. We will be less aware of the future cutbacks in off-budget spending activities.

State and local government spending, which has grown in real terms about 2.5% per year over the past ten years, is going to decline in 1982 for the first time since World War II. Economists have not paid a great deal of attention to state and local government spending, since it has been so stable over the last thirty years or so, but it is about 12.5% of gross national product (as of second quarter 1981), 3.2 times as big as the residential housing market in terms of its contribution to GNP, and far larger than federal government spending. There are quite a few factors contributing to the expected decline in state and local government spending in 1982 and beyond. Among them are the cutbacks in revenue sharing and in transfer payment income, and the chaotic state of the municipal bond markets because of high long-term interest rates. In addition, demographic trends are cutting back the demand for schools, and the softness in the housing market is dampening spending for sewers and other municipal services. We expect that real state and local government spending will decline about 1% in 1982.

REAL OUTPUT

The major current weaknesses in the U.S. economy are surveyed in the introduction. Other than the declining rate of inflation and falling short-term interest rates, there is little evidence of activity adding to new strength in the economy. The recession will not be as severe as the 1974-1975 dip, in good measure because autos and housing are currently so weak they don't have much room to decline further.

Table 3 gives preliminary projections for the recession, by sector, between 1981:2 and 1982:3. To add some good news to the rather bleak numbers presented in the table, recession is one of the best things we can hope for in the interim period while we wait for supply-side policies to take effect in 1983. Without a

Table 3
PRELIMINARY PROJECTIONS FOR THE RECESSION

Component of Gross National Product	*Level of Activity 1981:2 (billions, $ 1972)*	*Proportion of Total GNP (percent)*	*Percent Real Growth*
Consumption	955.6	63.3	– 1.5
Investment			
Nonresidential fixed	159.5	10.6	– 1.5
Residential fixed	48.2	3.2	0.0
Inventory change	9.7	0.6	– 5.0
Net exports of goods and services	46.0	3.0	–53.7
Federal government purchases	109.3	7.2	– 3.0
State & local gov't. purchases	180.8	12.1	– 1.0
Gross National Product	**1,509.1**	**100.0**	– 3.9

softening of the economy we would have run the risk of a head-on collision between the needs of the government to finance its deficit, and the needs of the private sector. With a mild recession we will avoid "crowding out"; short-term interest rates will be able to come down substantially and long-term rates down slightly. This will allow firms to refinance their debts from short- (which is currently a bulging $455 billion) to long-term and to provide a stable financial base for the economic growth we expect in 1983 and beyond.

INFLATION

The most recent figures on the producer price index indicate that we are beginning to win the battle against inflation. Of course, one robin doesn't make a spring, and two or three months of declining inflation rates don't mean that we are out of the woods yet. However, we are optimistic about inflation rates next year. The following points regarding inflation are in order:

1. Generally we have a basic underlying rate of inflation embedded in the economy, which is price level changes excluding food and energy. Tight monetary policies by the Fed are beginning to whittle away at this basic rate. However, things look good on both the food and energy fronts for next year. Since the oil glut appears to be sticking with us for a least the next year or so, there should be little upward pressure on energy prices. Even if natural gas prices are deregulated between now and the end of 1982, there will be only a slight impact on the overall rate of inflation. American farmers are having record crop years. The corn crop is now estimated to be a little over 8 billion bushels, the largest in history and a whopping 22% above the 1980 crop. Together with bumper crops of soybeans and record levels of

cotton, wheat and rice production, we can expect to enter 1982 with the biggest stocks of feed grains in history. These huge harvests should dampen food and fiber costs next year. This may be bad news for farmers, but certainly it is good news for the economy.

2. The outlook for wage demands next year is also quite encouraging. The major part of the wage contracts coming up in 1982 is in industries that are currently in dire economic straits. For example, the automobile, trucking and rubber industries are in no financial position to allow big wage settlements, and the unions in those industries are well aware of it. The unions involved at Pan Am World Airways and at Conrail have deferred pay increases or accepted pay cuts to keep the companies involved in business. As the recession we expect over the 1981-1982 interval continues, labor should become more concerned with preserving jobs than with obtaining big pay increases. If the rate of inflation continues to drop, there should be much less pressure from unions in 1982 wage negotiations than we have had in the past years of double-digit inflation.

3. The basic rate of inflation should diminish throughout 1982 as the recession lessens the upward pressure on prices of all goods and services. The current bulge in the real rate of interest should diminish toward 2% to 3% with a decline in short-term money rates of interest, rather than an increase in the rate of inflation. If the Fed sticks to its policy and turns expectations about future inflation around we should see the short-term money rate of interest, the real rate of interest, and the rate of inflation all declining moderately in 1982.

4. The CPI overstates inflation because of the overemphasis on housing costs, which in turn are influenced strongly by mortgage rates. Just as the CPI overstates inflation in a period when interest rates are rising, it will understate inflation when interest rates are falling. There has been a lot of talk about revising the CPI to eliminate this bias, but our guess would be that the administration would like to see it left in, so that inflation, as measured by the CPI, will decline more rapidly without change.

The good news on the inflation front expressed by the CPI for October 1981, and the expected further declines in inflation for November and December as the result of economic softness, insure that the U.S. will go on record as returning to single-digit inflation in 1981. We expect that the rate of inflation will continue to decline throughout most of 1982, with an average rate of 8% recorded for the entire year. Inflation will continue to abate throughout the first three quarters of the year and will then turn up somewhat toward year-end, as real economic growth begins to pick up in the fourth quarter.

EMPLOYMENT

Even though the economy has been sluggish throughout the early fall of 1981, the unemployment rate had been quite stable, running between 7.3% and 7.6%, between January and September. Many companies, faced with slack demand, had maintained their labor force, waiting for the 1982 upturn. Until August of 1981, the slowdown in the economy was generally limited to autos and housing.

Suddenly in October 1981 there was a new surge of layoffs not related to housing or autos, and the unemployment rate jumped to a rather surprising 8%. Unemployment among blue-collar workers in heavy industry, largely in construction and autos, remained high, but there was also increasing unemployment in real estate, in high technology industries, in the area of forest products, and among white-collar workers. By the end of 1981, unemployment will reach about 8.5%. The overall rate of unemployment usually lags the level of real economic activity by two or three quarters. We

expect that there will be a continued increase in the unemployment rate for almost all of 1982. The Chairman of the Council of Economic Advisers, Murray Weidenbaum, announced in mid-November that the jobless rate could rise to 9% before the recession is over. This would make the current recession roughly comparable to that of 1974-1975, making the two recessions equal as the worst since the 1930s with regard to employment.

The incidence of unemployment is always uneven, to the extent that it impacts more heavily upon the young, the unskilled, the uneducated and the nonwhite workers. In addition some sectors of the economy are affected more than others and different geographical regions of the country are hurt much more than others. The Midwest never recovered from the 1980 recession, but Texas still remains relatively untouched by the current slowdown.

Table 4 shows some major unemployment rates for October 1981, as calculated by the Bureau of Labor Statistics.

Table 4
OCTOBER UNEMPLOYMENT RATES
(percent)

Total unemployment	8.0
Construction	17.7
Manufacturing	8.8
Trade	7.3
Transportation and public utilities	4.9

Layoffs are starting to appear in many different sectors of the economy. There is increasing softness in the electronics and aircraft industries, and major appliance firms are feeling the effects of the slumping housing market. Firms in all of these industries have announced plans to slow production and lay off workers. For example, Pratt and Whitney, GE, Caterpillar, RCA, and National Semiconductor are all laying off workers.

The bad news is that these layoffs are coming at a time when transfer payment income sources are drying up, and some of the unemployed will be suffering greater hardships than they would have if they were unemployed a few years ago. The good news is that this will put downward pressures on wage demands next year and moderate settlements will be made in union-management negotiations next year.

Contracts covering more than 3.7 million workers will be negotiated in 1982, and with the current softness in the economy it will be extremely tough sledding at the bargaining table for some of the major unions. New contracts will be made in autos, construction, trucking, rubber, farm implements and clothing during 1982, and one thing all of these sectors have in common at the present time is their precarious economic situation. We expect that unions will be forced to settle for wage increases that will be 2% to 4% less than the pattern of wage increases agreed upon in 1980 and 1981. Unions will be more likely to stress job security than wage demands, and it is possible that the old contracts, such as for a 30% wage increase spread over three years, will not be showing up in 1982.

HOUSING

We believe that 1982 is going to be more or less a repeat of 1981 in residential housing, with starts in the neighborhood of 1.1 to 1.3 million. The reasons for an expected poor performance from the housing sector next year are the same as they were for 1981—tight money and high interest rates.

What was thought to have been one of the most favorable developments for the U.S. housing industry for 1982 was the initiation of All Savers certificates as of October 1, 1981. These certificates pay 70% of the rate on one-year Treasury bills, and their holders can

deduct as much as $1,000 of the interest income from their federal tax returns ($2,000 for married couples filing jointly). All Savers certificates were approved by Congress to offset the drain in funds suffered by the thrift institutions as a result of "unregulated" money market funds, and to help alleviate the severe cash drains that many of the savings and loan associations have been experiencing this year.

While these certificates may help bail out the ailing thrift industry, they will not provide much stimulus to housing. This seems odd, since Congress has imposed requirements on the issuers of these certificates that the proceeds be channeled into housing, forcing as much as 75% of all proceeds of All Savers certificates to be placed in home financing or in farm loans. However, there is no requirement that they be placed in mortgages financing the sale of *new* homes. As a result, many S&Ls will take the proceeds of the certificates and reinvest the funds in other already-issued mortgages and securities at a higher rate of interest. In addition, the Federal National Mortgage Association (Fannie Mae) has issued special one-year securities that the thrifts can purchase with the funds generated by selling the certificates. The thrifts will satisfy the home financing requirements of Congress, and Fannie Mae can use the funds to finance its portfolio of *existing* mortgages. At the present time, the FNMA is sitting on $52 billion of old mortgages, some of them yielding returns of less than 9%. You can be sure the FNMA would love to improve its income statements, since it is currently paying over 15% on its short-term borrowings. Fannie Mae can offer the thrift institutions a 12% to 13% return on the special one-year Fannie Mae securities, which will be moneymaking for both the thrifts and the association, since the All Savers certificates carry a current (November 25, 1981) interest rate of 10.77%. The only loser in this certificate program is Uncle Sam.

In the weeks preceding October 1, there was much ballyhoo that these certificates would shift substantial funds out of money market mutual funds and provide a shot in the arm to the construction and real estate markets. Neither of these things came to pass. The net asset positions of money market funds continued to increase. It is not yet clear where the money came from that went into the All Savers certificates, but it is clear that most of it was old, not new money. There are no hard numbers available yet, but it appears that 15% to 25% of the funds to buy the certificates came from outside the thrift institutions, and the remainder came from existing passbook accounts, and from transfers of CDs and other existing accounts within the institutions.

Why didn't the All Savers certificates help out housing? To answer, you need only ask the question, "If you were a savings and loan manager, would you take money you borrowed for fifteen months (October 1, 1980 through December 31, 1981) and lend it out on long-term mortgages?" This is precisely the reason that 70% of the savings and loan associations in the U.S. are in the red this year. Why ask for more trouble? The certificates ended up as a partial bailing out of the thrift institutions, and as a means of helping Fannie Mae unload some of its portfolio of low-interest mortgages, but with little tangible effect on the housing and construction markets.

Nineteen eighty-two will be a transition year for housing, but the outlook for 1983 is much brighter. Housing cannot make a substantial comeback until mortgage rates retreat from their current 16+% to 12% to 13%. Chances improve for this to happen in 1983 as a result of economic events forecast for 1982.

The continued underlying demographic factors signal a strong demand for housing through the rest of the 1980s. But the long-term outlook for residential housing may not be as bright as it has been over the last thirty years or so. Housing has been heavily subsidized by the government over the last three decades with the Federal Home Loan Bank system to lend money to savings and loan associations; with the FHA and the VA to subsidize,

guarantee and insure home mortgages; with FSLIC to insure savings deposits at thrift institutions; with Regulation Q to keep savings deposit rates down; and with the federal tax laws allowing deductions for interest and taxes on owned homes and capital gains deferments and deductions on the sale of residential housing.

The inflation of the 1960s and the 1970s made housing one of the best investments around, with long-term fixed rate mortgages at relatively low rates of interest and housing prices rising faster than the overall rate of inflation. The amount of capital going into housing increased substantially over this inverval, while the amount of capital available for productive investment languished.

The new supply-side economics, which focuses on long run capital formation for the industrial base, may shift funds away from housing to plant and equipment spending. Our guess is that the Reagan administration will attempt to initiate credit policies that will, in the long run, move funds from housing to investment in business capital.

CONSUMER SPENDING

Consumption spending has been the major factor in providing what small growth the economy has experienced so far in 1981. The recent declines in the stock and bond markets have been in the neighborhood of $400 billion, eroding about 5% of the net worth positions of households. High interest rates have curtailed spending on housing and autos, and a slumping housing market has eroded the sales for major household durables such as dishwashers and refrigerators. The increasing rate of unemployment and the continued softness in the economy will lead to a decline in real consumer spending next year of about 1% to 2%.

For a while in August and September, it looked as though consumption spending was rebounding, mainly because of a spurt of automobile buying stimulated by widespread declines in auto prices. As was the case in the 1974 downturn, the domestic automobile producers may have spoiled the 1982 market by excessive sales in late 1981.

Some forecasters are expecting an increase in consumption spending as a result of the 5% cut in income taxes that began on October 1 of this year. Such an increase is unlikely. The Reagan tax cuts are only an approximation of indexing taxes for inflation to eliminate tax bracket creep, and real tax rates will continue to rise in 1982. Consider, for example, a household consisting of four people with one wage earner making $30,000 a year. The fourth quarter 1981 tax cut will reduce the wage earner's taxes by only $58 for that quarter while bracket creep over the same interval will increase the same person's tax liabilities by $75. Add to this the sharp increase in the level of income subject to Social Security taxes that will take place on January 1 of 1982. The increase will mean that a large number of wage earners will have Social Security payments taken out of their paychecks for the entire year of 1982. For 1981, most wage earners had paid their entire contribution by the end of the third quarter. Since most households that earn less than $18,000 a year pay more in Social Security taxes than they do in individual income taxes, there will be a one quarter increase in real disposable income in the fourth quarter of 1981 that will come to a sudden halt on January 1, 1982.

Consumption spending depends on total wealth, not just personal income, according to the permanent-income hypothesis. For most of us, our major source of wealth is our own human wealth. However, the value of non-human wealth has been shown to affect the level of consumption spending. The decline in

the stock and bond markets so far in 1981 has eroded a great deal of the value of securities. On January 1, 1981, there was about $1,369 billion of assets trading on the New York, American and over-the-counter exchanges. By October 7, the market value of these equities had declined to $1,266 billion, a paper loss of more than $100 billion. Losses in the bond markets have been even more staggering. Between June and September of 1981, paper losses in fixed-income investments were in excess of $300 billion. There are no precise estimates with regard to losses in the commodities futures markets but they are probably larger than the losses on the stock and bond markets combined. Add to this the decline in the rate of inflation on residential housing (and their nonliquidity) and you have a lot of evidence to indicate households are a lot poorer now than they were at the beginning of 1981. This decreased wealth should lead to contracting consumption expenditures in the year ahead.

The other side of the consumer spending coin is consumer saving, and one of the major focal points of the new economic plan is to stimulate an increase in household savings. The tax cuts themselves will not have much effect on the level of household savings, first because they really aren't tax cuts, and second, because time-series consumption functions indicate that saving is a rather constant proportion of income over time. What will increase savings more than anything else is a return to positive real rates of interest, so that real savings are not eroded by inflation. The elimination of Regulation Q, the new regulations regarding IRAs and Keogh plans, and the changes in the U.S. financial structure are more likely to affect savings rates than anything else.

These changes will begin to show up on January 4, 1982, as people begin to take advantage of new laws regarding the treatment of funds put away for retirement. As a great number of households decide to put $2,000 per working member into an IRA account and deduct it from their taxable incomes, the savings rate may jump rather sharply in 1982. A variation of the basic economic law that says "There is no such thing as a free lunch" is the law that says "You can't save your money and spend it at the same time." If there is a sharp increase in the funds placed in savings, there has to be a decrease in the amount of funds spent. Not many households are going to put $2,000 or $4,000 into an IRA account, or put $10,000 or more in an All Savers certificate, and at the same time buy a new car or put a down payment on a house.

Those who are expecting the 1982 tax cuts to generate a Kennedy-type economic recovery led by consumption spending are missing the major focus of the current administration. That focus is on generating savings for a more rapid long-term growth rate. When you compare U.S. savings rates to those in West Germany or Japan, they are very low. To increase the overall savings rate in the U.S. we must set economic policies that will encourage savings by firms and by the government. We need to eliminate the double taxation of corporate profits and get the deficit of the federal government down. Our current tax system places the same tax on savings that it does on consumption, since it is a tax on income. In the long run it would be beneficial for the savings rate if we could tax consumption and eliminate the tax on savings, as is the case in those countries that use the value-added tax to generate tax revenue.

In summary, because of diminished real wealth, higher unemployment, flat real personal income, higher savings rates and increased taxes, consumption spending will decline about 1.5% in real terms during 1982.

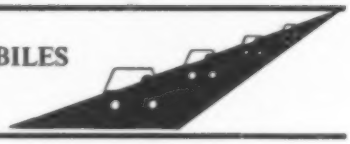
BUSINESS FIXED INVESTMENT

By all indications, business fixed investment will fare about the same as consumption spending during 1982, down about 1.5% in real terms. Declining orders for a wide range of industrial products took place in August and September of this year. Only defense-related industries and nonelectrical machinery industries have shown any sign of strength in recent months, and the outlook for plant and equipment spending has been described by a Department of Commerce economist as "pretty bleak."

Manufacturers are currently operating at about 79% of capacity, and, with no increase expected in real consumption spending, there appears to be little incentive for firms to add to capacity in the coming year. It is another case of a typical economic downturn. Consumption spending falls off, new orders fall, industrial production is cut back, unemployment rises, consumption demand continues to fall, industrial production declines further, etc. This is going to be the kind of activity we are likely to see between now and the fourth quarter of 1982.

The available fourth quarter data for 1981 provide substantial evidence that business fixed investment is deteriorating rather sharply. While the second and third quarter declines were limited to housing and autos, industries with major links to those sectors are now feeling the pinch. Firms producing steel, glass, trucks, farm machinery, furniture, and appliances, as well as housing brokerage services, are all cutting back their activities rather sharply. We expect further declines in capacity utilization rates and in final sales over the first half of 1982. This softness itself will operate to dampen business fixed investment for most of the year. Because of the long-term nature of capital investment projects, real capital spending usually picks up more slowly than other sectors of the economy. We expect that the recovery in business fixed investment will begin very late in 1982 and pick up steam in 1983.

AUTOMOBILES



For the first nine months of 1981 domestic auto producers assembled 4.953 million units, about 6% above the 4.677 million units produced over the same interval in 1980. There was a surge of auto sales in August and September of this year as a result of price discounts, interest rate subsidies and heavy promotional programs. The big three auto producers may have seen a replay of the 1973-1974 automobile inventory buildup that was an important cause of the 1974-1975 recession, and they have currently cut production back sharply in the fourth quarter of 1981. Sales of cars in the fourth quarter will be the lowest in twenty-three years.

One of the reasons for the softness in the automobile market is the relatively high price of the new domestic models. The average sticker price of a 1982 domestic automobile new exceeds $10,000. Consumer reluctance is reflected in sharply higher prices for used cars, as prospective purchasers who either can't or won't pay the five-figure price of a new car are opting for used models instead. Interestingly, the biggest jump in automobile prices isn't for the car, but for the "destination charge," which has jumped from about $200 in 1981 to almost $500 for the 1982 models. These charges used to be incidental (less than $100) back in 1978, when they were a minor item that was lumped in with taxes and license plate charges. The destination charge is higher to get a U.S. car twenty miles from the plant ($399) than to get a Toyota five thousand miles from Japan ($161).

The Ford Motor Company has temporarily closed two assembly plants, one in Michigan and one in California, and Chrysler is per-

manently closing its Scio Township plant in Michigan. American Motors has also temporarily closed its assembly plant for utility vehicles in Toledo, Ohio. General Motors has four assembly plants temporarily closed to gear up for the production of the new 1982 models.

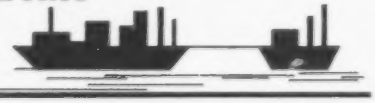
Surprisingly, in the face of a strong U.S. dollar this year, import sales are off about 9% from a year earlier. As of September 1981, import sales were running at about 2.1 million units, the lowest in two years. Domestic sales were running at a seasonally adjusted 6.7 million units in September, down from the 8.1 million level of a month earlier.

Automobile sales will remain soft over most of next year. Our estimates for domestic and foreign auto sales (at seasonally adjusted annual rates) are given in Table 5.

Table 5
AUTOMOBILE SALES

	Domestic Sales (millions)	*Foreign Sales (millions)*
1981:4	5.9	1.9
1982:1	7.0	1.8
1982:2	7.3	1.8
1982:3	7.8	1.8
1982:4	8.0	1.9

NET EXPORTS



The appreciation of the U.S. dollar in terms of the major foreign currencies that took place between January and September of 1981 has begun to deteriorate our merchandise trade balance still further. The surge in imports, as we have found foreign goods considerably less expensive in terms of dollars, is beginning to erode our foreign trade position. Assisting in its deterioration is a decline in U.S. exports, since the surge of the dollar on foreign exchange markets has made our exports less competitive on world markets.

Time series data on exchange rates and merchandise trade balances indicate that flows of imports and exports lag exchange rate fluctuations by as much as a year or more, since international contracts take long intervals to reflect current exchange conditions. Therefore, we can expect a deterioration in our merchandise trade balance throughout 1982 and beyond. Our merchandise trade balance was in deficit by $25.3 billion in 1980, and is anticipated to be in the neighborhood of a negative $29 billion for calendar year 1981. The 1981 surge in the dollar will cause the merchandise trade balance to continue to deteriorate next year. C. Fred Bergsten, senior fellow at the Carnegie Endowment, feels that the dollar is inflated by a considerable margin, and that its true worth, in terms of purchasing power in world markets, is 20% to 25% below current levels. Based on these estimates, we anticipate that the merchandise trade balance will deteriorate to a deficit of $36 billion in 1982 and to a minus $45 billion in 1983.

One reason the current net export picture looks better than it really should is because imports of crude may be substantially greater than the data suggest. An oil glut has forced some of the big petroleum firms to temporarily store oil in big tankers at sea, rather than having it delivered to overcrowded storage facilities on shore. Since imports aren't registered as such until they actually reach U.S. shores, there may be a lot of future imports sitting just offshore waiting to be recorded.

The OPEC is beginning once more to look like a cartel rather than a price leader-price follower institution. All the OPEC members except one have finally agreed on a $34 per barrel price. The Saudis raised their prices from

$32 per barrel, and many of the other OPEC members lowered theirs to the newly agreed-upon market price.

One positive thing that can be said for the increased volume of merchandise imports we will have in the coming two years is that reduced-value imports will assist in relieving domestic inflationary pressures.

SUMMARY

In summary, our outlook is bearish for 1982 but is bullish for 1983 and beyond. The major difference between our forecast and many of the other economic outlooks that you will see publicized at the beginning of 1982 is in the timing of the new Reagan program. We do not feel that the U.S. economy can shift rapidly from the Carter stop-and-go policies to the supply-side policies of the Reagan administration. It's going to take a year to shift gears. We just don't see how you can have all of those ten sets of factors noted in the introduction operating on the U.S. economy next year and expect anything but a sustained decline in economic activity for the early part of the year.

We remain very optimistic about the period for 1983 and beyond. The Reagan policies stress the long run, which essentially involves a restructuring of the economy to achieve sustained real growth of output and a permanent decline in the rate of inflation. Part of this policy is a shift of activity from the public sector to the private sector, and in 1982 we will see declining activity at the government level. It will be in 1983 that the private sector will enter a period of sustained growth, since Congress has designed the supply-side tax cuts in such a way that their major impact will not be felt until 1983. They did this by attempting to hold the federal budget deficit down for fiscal 1982. If, as we believe, 1982 proves to be a transition year, 1983 could be the year that we get a sustained real economic expansion somewhat similar to the one that started in 1960.

The Indiana Economy

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December 2, 1981

The somber forecast for the nation in the preceding pages produces a similar forecast for Indiana. The following is a summary of the forecast made with the Econometric Model of Indiana (EMI) in mid-November 1981:

1. Employment in Indiana will decline in the first two quarters of 1982 from the levels achieved a year earlier; employment will start to grow and in the last half of 1982 will exceed employment levels of late 1981.

2. Real personal income is expected to rise slightly (about 3%) in 1982: this growth will be concentrated in the latter part of the year.

3. Real wages and salaries, which dropped sharply in 1981:3, will decline again in 1981:4. Growth in real wages and salaries will be positive in 1982:1. The annual rate of growth will increase to almost 6% in the last quarter of 1982.

Summary of National Forecast

The forecast for Indiana was based on the forecasts for the U.S. economy presented on the preceding pages of this issue of *IBR*. The recession is expected to end in the first half of 1982, with real growth closing out 1982 with a 5% growth rate. The inflation rate (CPI) will decline until mid-1982 to around 6%, then it will rise to about 7.5% in 1982:4. Long-term interest rates will decline but not a great deal. The national unemployment rate will peak in 1982:2 at 8.6% and then begin a gradual decline.

Employment

Figure 1 shows total employment in Indiana from 1978:1 to 1982:4. These data are not seasonally adjusted; therefore, year-to-year rather than quarter-to-quarter comparisons should be made. The year-to-year comparisons show that employment in each quarter of 1979 was higher than employment in the same quarter in the following years. In 1981:3 there were 163,000 fewer people employed in Indiana than were employed in 1979:3. Our forecast is that employment will begin to grow in late 1982. The 1982:3 employment figure will be 7,000 higher than 1981:3, but still will be approximately 156,000 less than the figure for 1979:3.

Table 1 shows the values forecast for certain aggregate variables. We are forecasting that the seasonally adjusted unemployment rate will reach 11.5% in 1982:2. That rate is more than two percentage points higher than the unemployment rate in 1981:3. The unemployment rate is forecasted to decline after 1982:2, to 10.63% in 1982:3 and to 9.67% in 1982:4.

Table 1
EMI SUMMARY VARIABLES

Variable	*1981:2*	*1981:3*	*1981:4*	*1982:1*	*1982:2*	*1982:3*	*1982:4*
Personal income*	53,603.00	54,935.00	56,157.34	57,456.90	58,848.78	60,663.88	62,441.60
percent change (AR)	5.40	10.32	9.20	9.58	10.05	12.92	12.25
Real personal income*	27,991.12	28,071.03	28,120.85	28,206.63	28,347.20	28,709.83	29,015.61
percent change (AR)	−1.05	1.15	.71	1.23	2.01	5.22	4.33
Wages & salary disbursements*	33,533.00	33,467.00	34,038.81	34,919.33	35,818.04	36,861.06	38,069.52
percent change (AR)	2.45	−.79	7.01	10.76	10.70	12.17	13.77
Real wage & salary disbursements*	17,510.71	17,101.18	17,044.97	17,142.52	17,253.41	17,444.94	17,690.28
percent change (AR)	−3.82	−9.03	−1.31	2.31	2.61	4.51	5.75
Nonmanufacturing employment #	1,464.30	1,454.47	1,447.51	1,412.49	1,452.96	1,464.42	1,474.07
Manufacturing employment #	666.67	664.03	650.50	640.71	651.25	661.26	666.88
Establishment employment #	2,130.97	2,118.50	2,098.00	2,053.20	2,104.21	2,125.68	2,140.94
Total number employed #	2,353.93	2,342.60	2,308.56	2,255.17	2,325.08	2,349.59	2,353.57
Percent unemployment (NSA)	8.84	9.05	9.74	11.31	11.32	10.63	9.67
Percent unemployment (SA)	8.98	9.15	10.47	10.28	11.51	10.75	10.40

1981:3 Values are Preliminary
AR = Annual Rate
* = Millions of Dollars SAAR
# = Thousands of Persons, not Seasonally Adjusted
NSA = Not Seasonally Adjusted
SA = Seasonally Adjusted

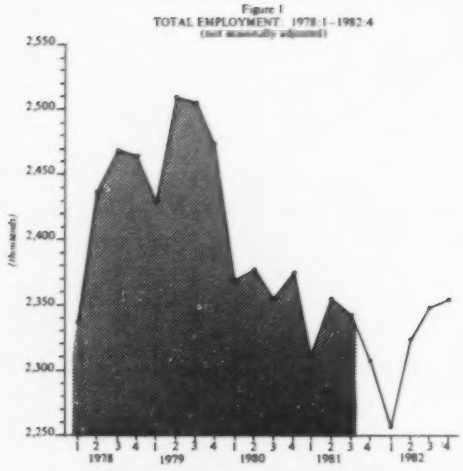


Table 1 also shows that improvement begins in nonmanufacturing employment in the third quarter of 1982. From 1981:2 to 1982:2 nonmanufacturing employment declines by 11,340 people, but from 1981:3 to 1982:3 there is an expected increase in nonmanufacturing employment of almost 10,000 people. Manufacturing employment begins to improve in the fourth quarter of 1982. There is a decline of 15,420 in manufacturing employment from 1981:2 to 1982:2 and a decline of 2,770 from 1981:3 to 1982:3. From 1981:4 to 1982:4, however, there is an increase of 16,380.

Personal Income

Figure 2 shows that the historical peak in real personal income was in 1979:1; after that it began a steady decline to its low in 1980:2. We are forecasting that real personal income will reach its 1979:1 level in 1982:4. Even though real wages and salaries, which make up around 60% of real personal income, declined by slightly more than 9% in 1981:3, real personal income grew by 1.15% from the previous quarter (Table 1). This increase from 1981:2 to 1981:3 was primarily the result of increases in dividends, interest and rent and in transfer payments. The increase in dividends, interest and rent was due to higher interest rates. The jump in transfer payments was the result of indexing. Together these two components of personal income account for 88% of the increase in real personal income from 1981:2 to 1981:3.

Real personal income is expected to grow at a slow rate in 1981:4 and in 1982:1, then it will pick up slightly, growing by just 2% in 1982:2. Real personal income will then grow at healthy rates of 5.2% in 1982:3 and 4.3% in 1982:4.

Wages and Salaries

Wages and salaries constitutes the major portion of personal income. Figure 3 shows that real wages and salaries reached its peak in 1979:1, then declined through the 1980:2 recession to 1980:3. There was some improvement in 1980:4 and 1981:1, but then real wages and salaries began to fall again as we entered our current recession. We expect slow growth in the first and second quarters of 1982 followed by high growth rates of 4.5% in the third quarter and 5.8% in the fourth quarter of 1982. In 1982:4 the real wages and salaries variable will be 7% less than it was in 1979:1.

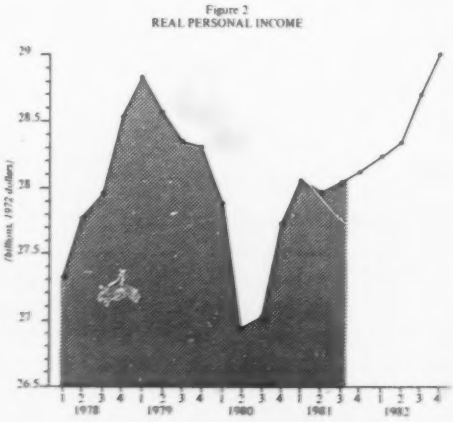
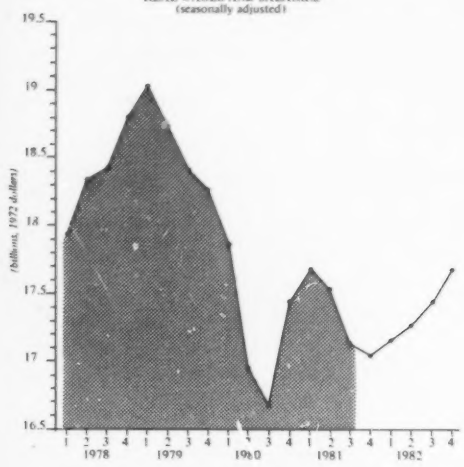


Figure 3
REAL WAGES AND SALARIES
(seasonally adjusted)



The decrease in real wages and salaries appears to have two sources, the more obvious of which is the decrease in the number employed. The expected number employed in 1982:4 is 3% less than in 1979:1. The less obvious source for the decline in real wages and salaries is that there is a decline in employment in some high paying sectors (e.g. autos and parts) while employment in some low paying sectors is increasing (e.g. services).

Conclusion

Although the forecast is relatively optimistic for the latter part of 1982, the levels of employment and real wages and salaries at the end of 1982 are expected to remain below their levels three to four years earlier.

INDIANAPOLIS

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November 16, 1981

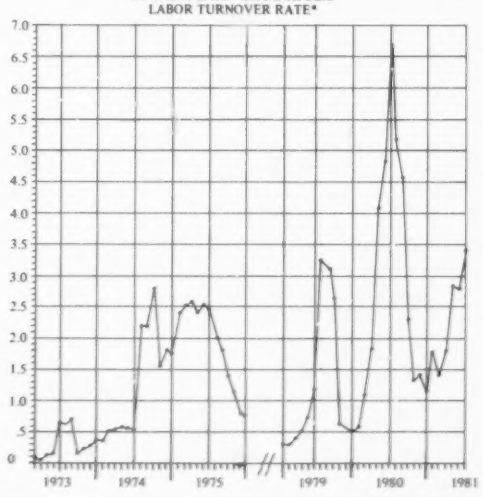
A forecast for the first half of 1982 requires three perspectives: the position of the metropolitan economy in the business cycle, an assessment of the structural changes occuring in the economy, and some speculation about the impact of the 1981 Economic Recovery Tax Act on the economy.

The Business Cycle

The duration and severity of the 1980-81 recession in the manufacturing sector is illustrated by the labor turnover rate shown in Figure 1. Actually, significant periods of layoffs have occurred in each of the past three years. These layoffs reflect unanticipated inventory accumulation. The turnover rate has reached higher levels during the current recession than during the 1973-75 recession. As inventories are depleted, both layoff and turnover rates should decrease by the spring quarter.

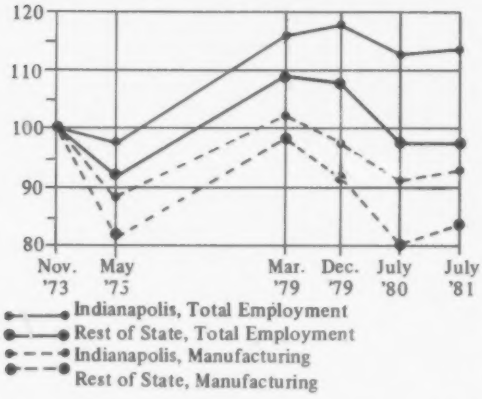
Since the automobile industry is a major contributor to the cyclical fluctuation, what cyclical factors might stimulate economic recovery? Two such factors are the decline in

Figure 1
METROPOLITAN INDIANAPOLIS
LABOR TURNOVER RATE*



*Layoff rate in manufacturing, turnover
Quit rate in manufacturing

Figure 2
EMPLOYMENT CHANGE
(November 1973 = 100)



interest rates and the aging of the automobile stock—25% of the total auto population is estimated to be 4-6 years old. On the precautionary side, however, the younger population is confronted with rising costs for housing and for utilities. These expenses reduce the discretionary income available for the purchase of new cars. From a supply-side perspective Chevrolet of Indianapolis is helping meet the challenge of foreign imports by providing the sheet metal panels for the new small S-10 pickup truck.

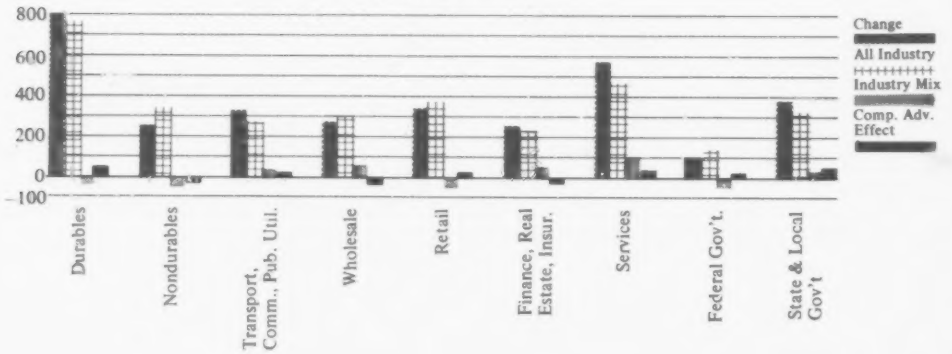
In an attempt to reduce production costs, the auto industry has substituted capital equipment for labor, causing a reduction in the labor requirement per unit of output and inducing a structural change at the same time the cyclical change is occurring.

Structural Change

The role of structural change is difficult to measure and analyze, because its magnitude depends on the standard by which you compare. Since the Indianapolis metropolitan area generates one-third of the state's total employment, it is important to compare the economic performance of Indianapolis with the rest of the state rather than with the entire state. This comparison, shown in Figure 2, leads to two important observations: (1) there has been a significant difference between Indianapolis's performance and that of the rest of the state; and (2) in the past year, both Indianapolis and the rest of the state have had limited recoveries.

Why the difference between Indianapolis and the rest of the state? The industrial structure of the Indianapolis and rest-of-state economies differs because the Indianapolis economy has a greater proportion of its economic activity in stable industries. A more

Figure 3
ANALYSIS OF INCOME CHANGE BY INDUSTRY,
INDIANAPOLIS METROPOLITAN AREA, 1974-1979
(figures in millions)



industry-disaggregated analysis of the Indianapolis economy using the state economy as a standard is provided by Figure 3. The first bar shows the actual change in the amount of labor and proprietors' income (in current dollars) generated by place of work by industry over the 1974-79 period in the Indianapolis metropolitan area. The second bar shows how much the change in income would have been if the industry had grown at the same rate as the state economy. The third bar shows how much of the actual change in Indianapolis may be attributed to whether the industry statewide changed faster or slower than the all-industry statewide rate—the industry mix effect. The fourth bar shows how much of the actual change may be attributed to whether the industry in Indianapolis increased its share of the statewide industry—the comparative advantage effect.

The following observations are made.

1. The durable goods industry was the largest contributor to *income growth* followed by services and state and local government (some of the state and local government increase was financed by federal dollars).

2. The industries that increased at rates *greater than the all-industry statewide rate* were transportation, communication, and public utilities; wholesale trade; finance, real estate, and insurance; services; and state and local government.

3. The industries that *increased their shares of the respective statewide industry* (showed a comparative advantage) were durables; transportation, communication, and public utilities; retail trade; services; federal government; and state and local government.

What are the implications for 1982? Although there will be much discussion about diversifying the economy from cyclical durables, it will be necessary to determine which durable goods industries have the comparative advantage and what the basis for the advantage is.

The role of the Indianapolis economy in the state economy is to serve as a transportation and communication center as well as a provider of a variety of personal, business, health and legal services and employment in hotels and motels and computer and data processing. The National Sports Festival in July, the White River Park and Convention Center expansion when completed, and the shift to an increasingly information-based economy will stimulate these kinds of activities.

Given the central location of Indianapolis, it is surprising that wholesale trade did not show a comparative advantage. The ongoing expansion of Park 100 should help in this area.

In previous recessions, government employment has been countercyclical—increasing during recessions to reduce the severity of the contraction. Indianapolis is the location of many state and federal government agencies. However, since May 1980, government employment in Indianapolis has been decreasing. This change—occurring during a *cyclical* contraction—reflects a *structural* change in the role of the federal government and a demographic shift in the age distribution of the population. Because of the current tight fiscal positions of the state and local governments, the government sector is not likely to play a countercyclical role. Therefore, the unemployment rate may rise to a higher level than in previous recessions before expansionary forces in the spring begin to reduce the rate.

Tax Act of 1981

A purpose of the tax act is to stimulate investment in plant and equipment. A critical question is, *Where* will the stimulus occur? An analysis of determinants of manufacturing investment among the fifty states has found that although low state and local taxes per capita are associated with higher levels of investment, other factors are more important. One of these factors is the labor cost variable. A state that

has high labor productivity and a low percentage of the labor force in unions is associated with high levels of investment. Another factor is the amount of capital stock per capita. Where high amounts of capital stock per capita already exist, a state is associated with high levels of investment. Although Indiana is a high capital-stock-per-capita state, and, therefore, should get a relatively high proportion of the new investment when it occurs, the state's labor cost variable may play a negative role.

The investment tax credit and accelerated cost recovery system may speed the process of shutting down older plants. Such plants are more likely to be located in the older industrial areas of the Northeast and Midwest. Therefore, it is important to monitor the expansion needs of our plants to insure that new investment occurs at existing facilities.

Indianapolis has several firms with significant research and development capability to develop new products, including Eli Lilly ($60 million research center to be started in spring), RCA, HURCO, Anacomp, Cybotech-Ransburg, Boehringer-Mannheim, Texscan, Bell Laboratories, Detroit Diesel Allison, Naval Avionics, and Indianapolis Center for Advanced Research. The city's educational institutions and a developing venture capital commitment add to the resources that are available to promote industrial evolution.

Our financial services industry—banks, thrifts, and insurance companies—will also be challenged to develop new products in an increasingly competitive environment.

Finally, although the federal tax code continues to treat homeownership in a very favorable way that has promoted suburbanization, the 1981 tax reform appears to provide a slight incentive for downtown rehabilitation through more generous tax credits for older buildings. Also, HUD has shifted the appropriation for its Section 8 rent assistance program to favor the central city by allocating relatively more funds for existing units and less for new units—thus contributing to a central city bias.

RICHMOND

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November 11, 1981

Again this October I took a survey of the business community in Wayne County. I sent questionnaires to 350 businesspersons who own or manage firms that are listed in the 1981 Membership Directory of the Richmond Area Chamber of Commerce. By type of economic activity the 82 reporting firms are: 22 industrial, 14 commercial, 3 financial, 2 agricultural, 2 recreational, and 39 other. Altogether these firms employ 10,345 persons or about one-third of the active labor force in the county.

Of the responding firms, those that are in the manufacturing sector represent transportation equipment, electrical machinery, non-electrial machinery, and wood and concrete products. Those firms in the nonmanufacturing sector represent finance, wholesale and retail trade, building trades, communications, and miscellaneous services. None of the firms from these two sectors is immune to the prevailing conditions of high interest rates, high prices for energy, and weak demand for products. Consequently, the local economy's sensitivity to the national economy translates into layoffs. Of the reporting firms, 30% have laid off employees and only 7% have plans to rehire for the rest of the year. Currently, the local unemployment rate is 9.8% and is expected to increase with the onset of a recession. If the recession is severe, then the local unemployment rate could climb to 14%, thereby repeating the June 1980 record rate.

Despite this dismal news, there is a glimmer of hope. About 40% of the reporting firms plan

to expand business activity in 1982. Such increased activity, along with the removal of nonattainment status in regard to environmental quality, is likely to brighten the employment picture. Further, an overwhelming majority of the businesspersons, particluarly those involved in retail trade, expect that President Reagan's economic program will favorably affect their enterprises. They somewhat temper their optimism concerning business conditions in 1982, partly because of the prevailing skepticism in Wall Street.

The money and credit markets, both national and local, are fully aware of the President's determination to balance the budget in order to bring down inflation. In view of past history, the markets want to see actual reductions in federal expenditures and not just promises. The Federal Reserve's adherence to monetary aggregates instead of financial market conditions breeds an instability. This keeps interest rates high, as financial market participants demand higher rates of return because of the uncertainties associated with monetary policy. For every interest rate point increase the federal government boosts its spending by $2½ billion, thereby widening the deficit and creating, among other things, the right condition for continuing high interest rates and less economic growth.

The reporting firms stress that in order to stimulate economic growth in the county we need balanced industrial diversification, expansion from within the existing industrial base, improvement in the labor climate, advanced educational opportunities for our young people, and city beautification with concomitant infrastructure. A designation of attainment status could eventually be a fillip toward meeting some of these needs.

Overall, in view of the economic downturn, I expect sluggish growth in the local economy for at least two quarters in 1982. Since manufacturing employment accounts for about 53% of all area incomes, it is imperative to arrest the slowdown in this sector so as to avoid its potential adverse trickle-down effects in other sectors of the local economy. Lower inflation and interest rates, along with the tax cuts, may make it possible to boost the manufacturing sector.

EVANSVILLE

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November 13, 1981

After a strong first quarter, the Evansville economy slipped into a recession, as did the economy in other parts of the nation, in the second quarter. The decline in the second quarter was slightly more severe than that experienced in the 1980 recession. The regional economy showed some recovery in the third quarter, but it moved downward again in the fourth quarter. The current recession is expected to continue at a mild rate through the second quarter of 1982. Thus the regional economy will not be able to recover to its 1979 activity level as projected in this report one year ago.

Because of the new recession, the overall performance of the Evansville economy in 1981 was no improvement over that of 1980. In terms of the Evansville Area Business Index, the composite index was 105.20 in 1980, and it is estimated to be 105.42 in 1981 (see Table 1). Various sectors of the local economy, however, varied in their direction and degrees of performance. Industrial production was up 1.7%, business construction was up 1.2% and the area employment gained 0.4%. Trade and services was down 0.8% and transportation was down by 1.9%. The finance sector suffered a 5.3%

EVANSVILLE AREA BUSINESS INDEX (1977 = 100, Revised)

	Industrial Production	*Trades & Services*	*Construction*	*Transportation*	*Finance*	*Employment*	*Composite Index*
Monthly (1981)							
January	116.77	103.41	116.67	105.29	100.75	106.84	109.56
February	113.19	104.88	110.55	99.54	99.16	105.36	107.72
March	113.69	102.88	115.06	102.25	100.39	105.76	107.87
April	99.92	100.68	107.06	99.19	98.21	104.95	101.32
May	102.84	99.39	107.95	98.34	96.25	104.61	101.78
June	103.52	101.76	110.64	99.10	97.34	105.50	103.28
July	115.25	101.93	110.57	98.68	96.88	105.59	107.28
August	104.29	102.97	107.73	100.94	98.54	106.37	103.95
September	111.60	104.14	99.71	96.77	96.68	105.91	105.75
Annual							
1978	102.45	106.47	123.28	104.51	108.95	106.92	106.66
1979	106.30	107.28	114.41	104.85	109.05	108.59	107.66
1980	106.38	103.90	109.41	101.57	103.38	105.08	105.20
1981*	108.25	103.10	110.82	99.68	97.94	105.49	105.42
1982†	109.00	105.50	113.00	100.00	101.00	104.00	106.67

*Estimated
†Projected

loss after a loss of 5.2% in 1980. The culprit of the current recession is the high interest rate, which has caused a reduction in consumer spending and in business investment. Because of low demand, area unemployment began to creep upward in the second quarter to a level above the national rate. The September rate was a record high of 8.9% and the unemployment rate may remain at that level through the end of 1981.

The recovery phase of this recession should start in the third quarter of 1982 as a new tax cut of 10% takes effect. With an expected growth of 2% in the second half, the 1982 economy is projected to gain about 1% over 1981.

In 1982, industrial production will be at about the same level as, or slightly higher than, in 1981. As business inventories run low and consumers regain their extra spending power, the production of durable goods should pick up. The trade and services sector has a good chance of improvement through the year at a rate of over 2% as a result of two new shopping centers expected to be open in 1982. New car sales may improve, especially with a lower interest rate. Residential construction cannot get worse, and it should improve if the mortgage rate declines by two percentage points. Business construction will remain strong throughout 1982, at a level slightly below 1981. Transportation activities should follow a trend similar to the performance of industrial production. The financial sector should improve in 1982 as the long-term interest rate declines, even though there may still be some

fluctuations in the short-term rate. The employment situation will get worse in 1982 compared to the 1981 average. The area unemployment rate may remain at 8 to 8.5% in the first half of 1982 and then slide below the 8% level in the second half.

In short, the Evansville economy in 1982 will see a year of ending recession and of a mild recovery. The growth rate will be 1.2% in terms of the Evansville Area Business Index. Economic and financial environments should become more certain and clear as the new federal economic policies take a firm hold.

SOUTH BEND–ELKHART

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November 17, 1981

The report from the South Bend and Elkhart communities has changed little from recent "Outlook Reports". We lack output data for the area, but employment statistics and other indicators of local activity suggest that the economies of these two communities have yet to recover from the broad effects of a downturn in transportation equipment and other durable goods and product markets that impacted the area in mid-1979.

Tables 1 and 2 give various indicators of local economic activity for the South Bend and Elkhart communities. The figures contained in the tables are seasonally adjusted and, with the exception of the unemployment rates, are index numbers expressed as a percentage of 1967 base year values. In each table, comparative index numbers are averaged for the year 1980 and 1981 through August. Index numbers are also given for an August 1980 to August 1981 comparison.

South Bend Nearly every indicator compared in the 1980 to 1981 year-to-year averages shows modest but continued decline–and 1980, when compared with 1979, was itself a year of declining economic activity in the area.

The picture is somewhat the same when comparing August 1981 with August 1980; however, when analyzing the detail behind that summarized in Table 1, it appears that there has been some recent strengthening in the cycle-leading manufacturing sector of the economy. In addition a recent declining trend in the overall work-force population has leveled off as we approach year's end.

Elkhart Although conditions in the Elkhart economy have been similarly depressed, one of its principal industries–the recreational vehicle industry–experienced a significant recovery from 1979 and 1980 lows. Shipments industry-wide will likely register a growth of some 40% for 1981 over 1980, and leading firms in the area are once again posting profits.

As in the neighboring South Bend community–and, of course, much of the nation–the housing sector labors under high mortgage rates and is very depressed. New housing permits issued remain at historic lows. Only offsetting activity in commercial construction has helped to keep the overall building sector alive.

Outlook The prospect for a mild recession in the national outlook should have only minimal effects in South Bend and Elkhart for firms capable of weathering another six months of an already prolonged local downturn. Recent signs of strength–at least relative to conditions over the preceding 30 months–in manufacturing employment, industrial energy sales, defense contracts and RVs–are pluses. Moderating interest rates and mid-1982 rebound nationally will be warmly welcomed in South Bend and Elkhart.

Table 1

SELECTED INDICATORS FOR SOUTH BEND
(Seasonally adjusted: 1967 = 100)

Indicator	*Average 1980*	*Average Jan.-Aug. 1981*	*Aug. 1980*	*Aug. 1981*	*Percent Change Aug. 1980-Aug. 1981*
Industrial Electricity Sales[1]	121.3	128.0	108.6	113.1	4.1
Natural Gas Sales[2]					
Commercial	134.5	131.9	110.9	134.4	21.2
Industrial	84.8	89.3	78.4	79.3	1.1
Employment Data[3]					
Nonagricultural Employment	115.8	112.8	114.0	111.1	– 2.5
Manufacturing Employment	85.3	83.4	83.6	84.1	.6
Nonmanufacturing Employment	134.6	130.4	133.3	128.0	– 4.0
Help Wanted Index[1]	72.9	69.5	64.4	71.5	11.0
Unemployment Rate[3] (% of work force)	9.6	8.6	10.0	8.1	–
New Passenger Car Sales[3]	91.8	77.7	94.3	77.7	–17.6
New Truck Sales[3]	131.3	105.5	138.1	123.6	–10.5
Construction Data[4]					
Estimated Value of New Housing Permits	216.4	152.3	277.6	90.7	–67.3
Number of New Housing Permits Issued	67.7	51.5	92.9	26.9	–71.10
Average Value Per New Housing Permit	322.9	349.0	321.1	362.4	12.9

[1] South Bend.
[2] St. Joseph County.
[3] South Bend SMSA.
[4] St. Joseph County excluding the cities of South Bend and Mishawaka.

SOURCE: Bureau of Business and Economic Research, Indiana University at South Bend.

Table 2

SELECTED INDICATORS FOR ELKHART
(Seasonally adjusted: 1967 = 100)

Indicator	*Average 1980*	*Average Jan.-Aug. 1981*	*Aug. 1980*	*Aug. 1981*	*Percent Change Aug. 1980-Aug. 1981*
Industrial Electricity Sales[1]	161.7	173.0	156.1	169.9	8.8
Natural Gas Sales[1]					
Commercial	156.5	153.1	110.1	137.5	24.9
Industrial	248.4	270.2	229.7	259.8	13.1
Employment Data[2]					
Nonagricultural Employment	129.8	129.7	126.3	130.0	2.9
Manufacturing Employment	111.3	111.6	107.1	113.3	5.8
Nonmanufacturing Employment	252.9	250.7	249.1	248.8	– .1
Unemployment Rate[2] (% of work force)	11.2	8.8	12.6	7.8	–
Construction Data[3]*					
Estimated Value of New Housing Permits	137.5	120.4	121.5	91.7	–24.5
Number of New Housing Permits Issued	59.1	46.6	56.9	33.9	–40.4
Average Value Per New Housing Permit	225.2	255.2	197.6	278.8	41.1

[1] City of Elkhart.
[2] Elkhart SMSA.
[3] Elkhart County excluding cities of Elkhart and Goshen.
*All construction data has base year 1970 = 100.

SOURCE: Bureau of Business and Economic Research, Indiana University at South Bend.

TERRE HAUTE

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November 20, 1981

The Terre Haute region has experienced two successive years of deteriorating economic conditions, and faces the prospect of further erosion. The dimensions of the decline are not at all clear, as available evidence is somewhat contradictory. Prospects through March of 1982 appear poor, while the magnitude and timing of any subsequent recovery remains uncertain.

The establishment employment estimates of the Indiana Employment Security Division provide the most comprehensive indicators of local economic activity. From September 1980 to September 1981 total establishment employment for the region is estimated to have declined by 3,700 jobs, or by over 5%, the most rapid deterioration for that time period of any metropolitan area in the state. A year ago, the loss from September 1979 to September 1980 appeared to be 3,800 jobs. Subsequent revisions reduced that loss, which now appears to have been 2,200 jobs. Thus, the cumulative attrition of the past two years comes to 5,900 jobs, or over 8½%.

Construction may well be the weakest sector in the local economy. Over the past twelve months contract construction employment fell by 800 jobs, or by 19%. For the same interval the value of permits for residential construction fell off by 20%, and the value of permits for nonresidential construction declined 60%. Lenders express extreme reluctance to initiate new construction loans, and they also perceive an absence of demand. The current industry employment level of 3,400 jobs substantially exceeds the 2,000-job annual average that prevailed through much of the 1970s. Construction activity will continue to fall in 1982 as projects initiated in 1979 and earlier come to completion.

The resale of residential property has become an increasingly difficult, and intricate, endeavor. Mortgages, when available at all, are subject to annual interest rate adjustments. But, in comparison to 1979, the number of mortgages extended to facilitate ownership transfers dropped by over 50%. With increasing recourse to contract sales and the like, total real estate transfers have fallen rather less drastically. Still, the difficulty of selling a house is illustrated by what must be at least a fivefold increase in newspaper listings of unfurnished houses for rent. Rising interest rates were the cause of the chaotic real estate situation, but declining rates will not eliminate the mess. Financial institutions, having been burned by losses on their mortgage portfolios, will not quickly return to aggressive lending policies.

The level of manufacturing activity has been stable in recent months. On a September-to-September basis, employment slipped by 900, but most of that occurred early in the year, with the closing of Stran Steel, and with a layoff at CBS. Manufacturing employment, while stable, is off 2,800 from the peak reached in 1978, and seventeen firms experienced layoffs at one time or another during the past year. Further, in December, the Visqueen Division of Ethyl Corporation will close its local production facilities, and J.I. Case will shut down operations for a month, laying off 600.

Retailers in Terre Haute serve a large market area that extends well beyond the SMSA, and well into rich agricultural areas in central Illinois. Conditions in agriculture impact strongly on retail sales. Local farm income is bad for the second straight year. Spring rains, and an early frost contributed to uneven yields,

while bumper yields elsewhere, high interest rates, and worldwide recession, contribute to low commodity prices. Perhaps in response to higher energy prices, perhaps in response to market saturation elsewhere, modern shopping centers are going up in smaller outlying communities, reducing the appeal of a trip to the city. Given other area problems–unemployment in construction and manufacturing, declining real income of government employees, declining transfer payments–retailers should be hurting. Perhaps they are. From September 1980 to September 1981 employment in retail trade dropped by 1,100, the greatest absolute decline of any sector, and that occurred in spite of the addition of 200,000 square feet selling space in Honey Creek Square. The announced closing of the Montgomery Ward Store on December 24 will reduce employment by an additional 160. Still, merchants report that 1981 sales were not that bad, at least not until conditions turned sour in October. Vigo county car dealers increased their share of Indiana sales, and general merchandise sales apparently kept up with inflation.

1981 was not a good year for Terre Haute, and as the nation is slipping into recession local conditions are not improving. One can harbor hope for the spring.

JEFFERSONVILLE NEW ALBANY (Louisville Area)

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November 23, 1981

The Louisville-area economy remained very sluggish during the first nine months of 1981, although conditions were not as bad as in northern Indiana. Preliminary data for October, however, point to a significant downturn in employment and output for the final quarter of the year.

Economic activity in the Louisville area had declined during the first three quarters of 1980, turning upward rather definitely during the last quarter of that year (see Table 1). The recovery appears to have faltered after that, with temporary gains in some sectors during early 1981 more or less offset by later declines, particularly in the third quarter.

Here, as elsewhere in the nation, the weakest sectors are housing and motor vehicles, together with businesses that depend upon these industries. The sharp decline of these two sectors provides a graphic illustration of the disadvantage of our relying on a restrictive monetary policy alone to reduce inflation: the burden of the resulting economic slowdown falls disproportionately upon the most interest-sensitive industries.

The Louisville area has had losses at both the manufacturing and the retailing stages of the automotive industry. In addition to the previous shutdown of local LTD production, Ford's truck plant has gone through a series of layoffs and recalls, with layoffs generally predominating. Employment should pick up after the first of the year, when production of Ranger trucks begins at the former LTD plant.

During the first nine months of 1981, car sales improved by about 1% over their lackluster 1980 level on the Louisville side of the Ohio River, but they declined by about 1% in the Indiana portion of the metropolitan area. Overall, the gain in number of cars sold was 0.8%, with sales of domestic cars gaining ground at the expense of imports. Truck sales declined about 3% overall, with Floyd and Clark Counties in Indiana again faring worse. Reflecting the poor market, two car dealerships closed in the Indiana counties. Three dealerships have closed in Jefferson County, Kentucky, but about four times as many dealerships remain there as in the less populous Indiana counties.

Table 1
ECONOMIC INDEXES, LOUISVILLE METROPOLITAN AREA, 1979-1981
(Quarterly Averages, seasonally adjusted, 1967 = 100)

	Industrial Production Index	*Trade & Services Index*	*Construction Index*	*Financial Index*
1979:				
Q1	125.5	151.4	152.4	346.6
Q2	122.6	149.8	143.5	365.3
Q3	118.4	148.8	150.5	375.6
Q4	116.1	150.2	156.0	373.2
1980:				
Q1	114.6	148.3	129.3	408.1
Q2	102.5	136.8	103.4	382.8
Q3	102.0	137.5	123.6	378.7
Q4	109.1	141.6	134.9	391.1
1981:				
Q1	107.3	148.8	130.2	388.3
Q2	111.6	141.7	131.2	381.1
Q3	106.1	141.6	123.3	393.7

SOURCE: Research Department, Louisville Area Chamber of Commerce

Housing starts, and home sales in general, remained very depressed in 1981. Construction employment was buoyed somewhat by large public and private building projects in the downtown area, as well as by a number of commercial and office projects throughout the metropolitan area. Restoration and remodeling of existing buildings, including private homes, also helped partially fill the home construction void.

The number of new building permits issued during the first nine months of 1981 reveal the extent of the new housing decline. In Jefferson County, which includes the city of Louisville, the 519 permits issued this year for single family dwellings were only 55% of the number issued during the same months of 1980—which was itself a slow year. When multifamily units are included, the total residential units (1,413) authorized for the first three quarters of 1981 amounted to 80% of the units authorized during the corresponding 1980 period. Single family building declined less in Clark and Floyd Counties. The 310 permits issued through September 1981 represented 80% of the corresponding 1980 level. Total dwelling units authorized in the two Indiana Counties during the first three quarters of 1981 equaled 75% of the 1980 permit level. When current residential building is compared with the more vigorous activity of the late 1970s, the gap becomes much more pronounced. The total number of residential units for which building permits were issued in the first nine months of 1980 represented 40% to 65% of the corresponding number issued in the 1976 to 1978 period, with the exact percentage depending upon the county and the year chosen for comparison.

The national slowdown in homebuilding and housing sales affected related industries in this metropolitan area. Southern Indiana's most vulnerable major industry is the manufacture of veneers and wood products. Although many firms managed to hold their own rather successfully through the summer, by September or October most were reporting significant declines in orders and impending layoffs. On the Kentucky side of the Ohio River, General Electric, the region's largest employer has seen a drastic decline in appliance orders. While its work force appears to have been cut back less than proportionally, there have been a number of temporary layoffs, as well as some permanent ones, throughout 1981, culminating in a six-week temporary furlough for most employees at the end of the year.

Other capital goods industries are also particularly susceptible to high interest rates and economic slowdowns. International Harvester was among those seriously affected here. Jeffboat, in Clark County, which until recently had enjoyed very strong demand for its barges, caught up with its back orders this fall and will lay off 600 workers, including the entire third shift, by the end of the year.

Instead of growing by 10,000 to 14,000 jobs, as usually happens in years of economic growth, the five-county metropolitan area had the same number of employed workers (389,200) in the third quarter of 1981 as it had

Table 2
LOUISVILLE AREA EMPLOYMENT AND UNEMPLOYMENT, 1979-1981*
(Quarterly Averages)

	Louisville Metropolitan Area+		Clark and Floyd Counties	
	Nonfarm Employment	*Unemployment rate (%)*	*Nonfarm Employment*	*Unemployment rate (%)*
1979:				
Q1	395,000	5.0	45,000	6.2
Q2	407,200	5.1	47,100	6.0
Q3	405,900	5.7	47,100	6.4
Q4	402,900	5.1	47,900	5.9
1980:				
Q1	389,300	6.6	46,600	7.4
Q2	391,900	9.0	47,700	9.1
Q3	389,200	8.9	47,200	8.7
Q4	390,900	7.6	48,100	8.0
1981:				
Q1	384,500	8.0	47,400	8.3
Q2	389,900	8.2	48,500	10.1
Q3	389,200	7.8	48,800	9.1

*The employment data refer to establishments located within the area cited and include workers on strike; the unemployment data refer to residents of the area cited, and are seasonally adjusted.

+Includes Floyd and Clark counties in Indiana, and Jefferson, Oldham, and Bullit counties in Kentucky.

SOURCES: Indiana Employment Security Division; Kentucky Department for Human Resources

had a year earlier, with the average number of employees for the full nine-month period actually declining slightly in 1981 (see Table 2). Most job losses were in manufacturing, construction, and transportation (especially rail and motor freight); gains occurred in government and service sector employment.

As was true in 1980, total employment expanded in firms located in Floyd and Clark Counties, with an average of 1,000 more jobs held in the first three quarters of 1981 than in the same months of 1980. This is roughly half the normal job expansion for the two Indiana counties. Employment in these counties is less dependent on the housing- and auto-related industries and therefore suffered less from the declines affecting those sectors. By year-end, however, the layoffs at Jeffboat, as well as at the Census Bureau, will offset job gains in other industries, and all metropolitan area counties are likely to show net job losses.

Unemployment rates are higher locally than nationally, but not as high as in several northern Indiana cities. The metropolitan area unemployment rate (seasonally adjusted) averaged 8.0% for the first nine months of 1981, compared with 8.5% for the same period in 1980. The higher unemployment rate for residents of Clark and Floyd Counties (a 9.2% average for 1981) probably reflects the fact that about one-third of the workers who live in those counties commute to jobs in Kentucky, and a disproportionate share of these commuters are likely to have held jobs in the large manufacturing firms that laid off the most workers.

Preliminary data for October indicate a further slowdown in the local economy, with employment falling and unemployment rising as 1981 ends. As the recession deepens both nationally and locally, more sectors of the metropolitan-area economy will be affected. An upturn is not likely until late spring or early summer. Naturally, the faster interest rates decline and the more convincingly inflation moderates, the sooner will the recovery begin and the stronger it should prove. Consumer spending will be stimulated midyear by the scheduled tax cuts, which will enhance the recovery. While housing starts should improve by midyear, employment will lag. Overall, therefore, the 1982 Louisville area economy is likely to produce an average activity level very similar to that of 1981.

KOKOMO–MARION

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November 25, 1981

Overall, the performance of North Central Indiana's (NCI) economy during the first ten months of 1981 could be described as neither very strong nor very weak. Unemployment rates dropped significantly from their highs in 1980; yet they remained high above the national average, and, in many areas, above the state average. While the news about the expansion plans of existing industries and the arrival of new industries was greeted with enthusiasm, some old or financially troubled industries quietly folded their businesses. In some industries the existing production schedules were expanded, thus paving opportunities for new jobs; in other industries, however, jobs were lost because of production cutbacks. The performance of the housing sector remained dismal due to extremely high interest rates. In particular, the construction of new homes slowed noticeably.

City and county governments were forced to trim their budgets because of dwindling tax revenues and cutbacks in state and federal aid.

Many public schools registered declining enrollments because of migration of people from the area.

Along with the factory workers, farmers had to face economic hardships. NCI farmers suffered $108.7 million crop damage, or 9% of total crop damage in the state, due to heavy spring rains and flooding.

Finally, NCI was omitted from the Enterprise Zone Commission set up by Governor Orr. Given the economic conditions in NCI and the policymakers' tilt towards the idea of enterprise zones, it would have been appropriate to have an NCI representative on the commission.

Now, of course, with the news about the back-to-back recessions, the economy will be jolted again. NCI's economy is quite sensitive to the trends in the national economy because of its close ties with the manufacturing sector, especially auto, steel, transportation, and heavy industries. This sector shifts its gears rapidly in the event of impending recession or recovery.

Already, the signs of recession are showing up in NCI's economy. The unemployment rates have started to rise after reaching lows in June and July. Factory production has slowed down as implied by the lower rate of increase in the industrial electricity use. Sales of existing homes have declined. Similarly, new residential home construction activity has almost halted.

THE 1982 FORECAST

What's in store for NCI's economy? As I dust off my crystal ball and gaze through it, I see depressing economic statistics for the fourth quarter of 1981 and the first two quarters of 1982. The recession at the national level will likely remain longer and deeper than the Reagan administration would like to concede. It will prompt more layoffs and hardships throughout NCI.

In NCI's economy, the recession will extend through the first quarter of 1982. The economy will sputter and spurt through the second quarter. It will gain momentum in the third and fourth quarters of next year. NCI's economy, trapped in a roller coaster-style industrial activity, will turn upward earlier than at the national level. In general terms, the economic forecast for NCI's economy is as follows:

Employment

Unemployment rates will remain high in the final quarter of 1981 and the first quarter of 1982. They will remain stable or begin declining in the latter part of the second quarter, and continue to do so in the third and fourth quarters. Layoffs will occur, mostly in the manufacturing sector. Some city and county government employees will likely lose jobs because of the budgetary crunch.

Increased layoffs in factories will be accompanied by shorter workweeks and reduced overtime during the next three to five months. In the event of economic upturn, the employers will first increase the overtime and then gradually recall laid-off workers or hire new ones.

Hourly Wages

Employers will increase pressure on the labor unions to accept wage concessions. Workers will likely accept a freeze or lower wage increases in order to preserve their jobs. Overall, workers will not make many gains on the wage front.

The Housing Sector

Homebuyers will not get much relief in the mortgage interest rates in the coming six months. The mortgage rates will likely drop to 15% or somewhat lower levels before starting to rise along with the expected economic recovery. A strong recovery in the housing sector

will not occur until the mortgage rates fall to 13% to 14% levels. The chances of achieving such low levels are dim.

Retail Sales

Because of a recessionary psychology or the erosion of confidence in Reaganomics, consumers will spend their money cautiously in the coming six months. Cash registers will not ring loudly during this year's Christmas season.

Retail sales will remain less vigorous in the next six to eight months than before. This will mean lower sales of big-ticket items. Businessmen will also maintain lean inventories because of high interest costs and lower expected sales.

In the latter part of the second quarter or the early part of the third quarter, the consumption spending will increase because of high expected incomes. Consumers will have or will expect to have more spendable income because of job recalls or overtime. They will also get a 10% cut in personal taxes, beginning July 1982. Many people will also have additional income coming from interest earnings on saver's certificates, mutual funds, and government securities. All in all, retail sales will remain strong in the latter half of next year. Higher consumer spending will stimulate the economy.

City and County Governments

Reduced business and industrial activity will lower tax collections for city and county coffers. In addition, tax breaks given to many industries and further cutbacks in the state and federal aid will reduce the size of city and county revenue pies. This will force city and county governments to trim expenditures, lay off employees, or increase taxes. Balancing city and county budgets in the NCI will be as difficult a task as walking barefoot on a tightrope!

Public schools will experience further declines in enrollments because of migration of families to the sunbelt area or to regions with economic growth prospects. Teachers will likely get smaller salary raises than before and some teaching jobs will be consolidated or abolished.

Farm Income

Various government reports suggest that farm income will either remain unchanged or will decline slightly because of lower prices. Prices will remain low because of bumper crops and reduced foreign demand.

Inflation

Inflation, as measured by the CPI, will remain in single digits, yet very close to a double-digit number during the next six to eight months. However, with the upturn in the economy, prices will increase in the third and fourth quarters of 1982. Grocery prices will remain fairly low and steady.

SUMMARY

North Central Indiana's economy will remain weak during the next six to eight months. Hard times lie ahead for many people. Reduced unemployment and supplemental benefits, and cutbacks in welfare payments, food stamps, and other forms of assistance will make life difficult for many unemployed people.

Unemployment rates will remain in the double digits and the labor force will experience further shrinkage. Factory workers will not make many gains on the wage front. The chances of the housing sector recovering strongly are dim. Retail sales will not remain vigorous in the next six to eight months; they will, however, zoom up in the latter half of 1982. City and county governments will be faced with significant reductions in their rev-

enue pie. Farmers will not make many gains in their income. The inflation rate will fall moderately during the next few months and start rising in the latter half of 1982.

GARY–HAMMOND EAST CHICAGO (Calumet Area)

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November 20, 1981

Our March 1981 forecast slightly overstated the pace of the recovery from the 1980 recession by less than 1%. We had not expected the sizable decline in manufacturing. Much of the drop was, however, external and could not have been detected by the econometric model. We hope that the closings of Pullman Standard, ECI, and Rand McNally and the contemplated closing of Graver Tank are nonrecurrent events. The nonmanufacturing sector performed somewhat better than we had forecast, gaining over 3,000 more jobs than the model had predicted. We started 1981 with a gradually declining employment deficit as compared to 1980, from a 1,900-job deficit in January to a 400-job deficit in April. The total job deficit for the first four months was 4,200 jobs. By the third quarter of 1981 the deficit for the three quarters, has turned into a surplus of 19,600 jobs over 1980.

The decline in steel employment was almost continuous since the first quarter of 1979, dipping from 69,200 to 66,000 in the first quarter of 1980 and continuing the downturn to 56,600 in the second quarter of 1981. Thus, considering the past long recessionary period, 1981 does not look as bad locally as it appears nationally. And in spite of a loss of about 900

Table 1
SEMIANNUAL SURVEY OF FIRMS
(November, 1981)

	Manufacturing	*Nonmanufacturing*	*Total*
Percent rise in last quarter sales or output	+3.32	16.25	4.12
Percent decline in last quarter sales or output	–5.48	– 5.68	–5.51
Weighted Net Proportion	–2.31	7.32	1.03
Expected percent rise in future sales or output	2.41	11.91	3.35
Expected percent decline in future sales or output	5.09	–15.31	–5.73
Weighted Net Proportion	3.66	– 4.12	–2.99
Percent rise in last quarter prices	2.37	1.44	2.48
Percent decline in last quarter prices	–8.64	0	–7.64
Weighted net percent	–5.42	1.44	–4.99
Expected percent rise in future	2.39	2.33	2.39
Expected percent decline in future	–1.48	0	–1.08
Weighted net proportion	.91	2.33	1.11

Table 2
SEMIANNUAL SURVEY OF FIRMS
(November, 1981)

	Manufacturing	*Nonmanufacturing*	*Total*
Proportion of firms reporting declines and expecting further declines	36.8	8.1	33.7
Proportion of firms whose output rose last quarter but who expect declines	17.6	50.2	20.6
Proportion of firms whose output rose and who expect further rise	26.5	39.1	27.1
Proportion of firms whose output declined, who expect a rise	18.6	2.6	18.6

jobs in September 1981, we still had 4,400 more jobs in steel than in the same month last year. We expect a decline in steel in the fourth quarter and extending to the middle of 1982, with a total loss of jobs roughly equivalent to the 4,400 which were lost in 1980. Thereafter we would expect a turnabout and a gradual increase in steel employment to about 65,000, which appears to be the intermediate term average.

The fact that steel and manufacturing in general is still providing a substantial primary income flow can be demonstrated graphically by the following. Earnings in primary metals are rising at a 5.3% average and have risen 19.8% from August 1980 to August 1981 and 4.3% from July 1981 to August 1981. On the other hand, earnings in the nonmanufacturing sector, which have increased 40.4% over the last year, are beginning to decline slightly at a 0.5% rate. Thus, one would expect a continued rise in real earnings in the region in spite of some loss of jobs.

Monetary policy is expected to be moderately tight. We respond, among several other stimuli, to M1B, that is, money supply in 1972 dollars, with a lead of nine to eleven months. On the average we lose about 390 manufacturing jobs for each percent decline in the index. Since M1B has been falling relative to 1980, we would expect a continued loss of jobs in manufacturing. Out of twelve indicator series and three aggregate series that tend to explain almost 90% of local manufacturing employment, nine are currently declining.

The unknown is consumer spending. Clearly local dollar incomes have been steadily rising at a pace exceeding national rates. Yet retail sales have declined 8.2% which is somewhat below the unprecedented decline of 17.6% in 1980. The indexing of wages overcompensates workers for erosion caused by inflation. (This is not true of wealth or savings.) A 10% raise for a ten-month period when prices rise 1% each month will reduce nominal income only about 5%. Because of the staggered nature of labor contracts and price increases the real incomes of consumers are not likely to fall unless local layoffs greatly accelerate, which is not likely.

Our semiannual survey of local businesses, which leads about six months, is substantially less optimistic than the corresponding March, 1980 panel. Noteworthy is the fact that not a single firm expects to significantly increase its work force. Also, almost 72% of large firms with over 1,000 employees have experienced moderate to substantial losses of jobs (Table 3). Manufacturing continues in a pessimistic mood, as indicated in Table 1. Table 2 indicates that 36.8% of reporting firms have experienced declines in output and expect further reductions in the future. Thus no turnabout is

Table 3
SEMIANNUAL SURVEY OF FIRMS
(November, 1981)

	Total	Small Firms, under 100 Employees	Medium Firms, 100-1000 Employees	Large Firms, over 1000 Employees	Manufacturing	Nonmanufacturing
Proportion of firms who experience a moderate decline in employment	33.8	19.0	46.4	38.1	34.6	25.0
Proportion of firms who experience a significant decline in employment	9.1	9.5	10.7	33.3	10.3	–
Proportion of firms who experience no change in employment	45.4	54.8	39.3	14.3	43.6	2.9
Proportion of firms who experience a moderate increase in employment	7.8	9.5	3.6	14.3	9.0	25.0
Proportion of firms who experience a significant increase in employment	3.9	3.9	0	0	2.6	25.0
Percent of firms who expect a moderate decline in employment	20.0	12.5	32.1	14.3	22.4	0
Percent of firms who expect a significant decline in employment	4.0	2.5	7.1	0	3.9	10.1
Percent of firms who expect no change in employment	68.0	80.0	50.0	71.4	68.4	49.9
Percent of firms who expect a moderate increase in employment	8.0	5.0	10.7	14.3	5.3	50.0
Percent of firms who expect a significant increase in employment	0	0	0	0	0	0

Table 4
SEMIANNUAL SURVEY OF FIRMS
(November, 1981)

	1981 3rd Quarter (actual)	*1981 4th Quarter (forecast)*	*1982 1st Quarter (forecast)*	*1982 2nd Quarter (forecast)*
Total employment	250.6	259.21	251.03	249.8
Manufacturing employment	90.3	91.57	91.69	90.73
Steel employment	62.2	61.58	62.06	62.94
Nonmanufacturing employment	160.2	162.64	159.34	158.9
Wholesale and retail trade	51.6	53.1	50.8	51.8
Public employment	31.5	32.03	33.37	32.09

expected soon. Table 4 gives the predictions from the Northwest Indiana Econometric Model.

FORT WAYNE

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November 20, 1981

The Fort Wayne-area economy for 1981 is continuing an unabated downslide that began in mid-1979. The most optimistic outlook for year-end 1982 is for modest improvement over current conditions; however, this can easily be reversed by new chapters in the International Harvester saga.

From December 1979 through December 1980, seasonally adjusted wage and salaried employment in the Fort Wayne SMSA (Adam Allen, DeKalb and Wells Counties) declined by 11,400 to 173,200. In the first six months of 1981 preliminary data indicate the loss of an additional 2,500 jobs. Although employment turned up sharply in the third quarter to regain the 2,500 jobs, the brief momentum is likely to be reversed given the recent downturn in the national economy.

Dissection of area employment trends is even more illuminating. During the last year, employment in electrical equipment manufacturing increased by 2,300, while transportation equipment and government employment decreased by 1,100 and 800. Restated, area electrical equipment manufacturing (e.g., Magnavox) was stimulated by increased federal defense spending but transportation equipment was depressed by International Harvester's dramatic retrenching. Nonmanufacturing employment was depressed by (1) the negative multiplier effects of reduced "basic" employment on the service sector and (2) the reduction in federal nondefense spending. In fact, the negative multiplier effect has yet to run its course as epitomized by the continued closing of numerous service activities.

Given the emphasis on International Harvester, one may conclude that IH "is" the area economy. This is not the case in that IH's current employment of 6,500 constitutes less than 4% of area employment. However, when economists forecast change in economic activity, IH—or any other relatively large employer—can easily become the dominant factor. For example, the forecast last year was for the economy to regain by year-end 3,500 to 5,000 of the jobs lost in 1979. It appears now that if there is any change in employment, it will be slightly negative. Although the absence of IH's problem would not have totally salvaged last year's forecast, it certainly would have helped make the forecast more credible.

The forecast for 1982 is for an increase of 1,000 to 2,000 in wage and salaried employment by year-end (as compared with third quarter 1981 employment, currently estimated to be 174,500). Although the forecasted change is minimal, the internal dynamics are likely to be significant. Employment is expected to trend downward through the second quarter of 1982 before turning upward. Within the manufacturing sector, further gains in electrical equipment employment are likely to be offset by further erosion of transportation equipment employment. Nondurable goods employment will increase but the overall contribution will be small because the sector is small—only 12,500 employed currently. The nonmanufacturing sector will remain under constant pressure as a result of (1) reduced contract construction activity, (2) reduced government employment, and (3) continued adjustment—contraction—to the reduction in "basic" employment occurring

since 1979. One forecast-related assumption is that no major plant closing or relocation will occur in the Fort Wayne area, although the significant probability of such has to be acknowledged. The only positive risk apparent to the forecast is if IH (or a successor) were to contract operations with a "circling of the wagons" at the Fort Wayne facilities, resulting in a significant increase in employment from the current level.

Single family new housing construction in Allen County is essentially dead. Building permits have been running in the neighborhood of 30 per month in 1981, and we will be fortunate if they total 400 for the year. This compares with 714 last year–which was then a record low for the 14-year period for which data are available. Realization of 400 permits in 1981 would be 80% below the 1978 peak year total of 1,984 permits. Given the sustained reduction in employment in the area and the accompanying exodus of families, there is undoubtedly a substantial inventory of existing housing. Thus a reduction in mortgage rates is a necessary but not a sufficient condition for revival of this sector of the area economy. New single family building permits should total 500 to 600 in 1982, a large percentage increase but still an anemic performance.

Area retail sales–using seasonally adjusted monthly department store sales as the available proxy–have grown in line with the national economy in 1981. The forecast had been for area retail sales to outperform the national economy because of an expected snapback from the 1979-1980 IH strike; however, this did not occur. The 1982 forecast is that area retail sales will be up 8 to 10% (year-average over year-average) with 6 to 7% being the result of inflation. The recent opening of the Dayton-Hudson store will increase Fort Wayne's image as a regional shopping center.

In summary, the forecast for the Fort Wayne-area economy is that it will have minimal growth in 1982 but that the direction at year-end will be distinctly upbeat.

MUNCIE–ANDERSON

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November 24, 1981

At midpoint of the final 1981 quarter the nation's economic activity falls sharply, following two lackluster quarters of slightly negative real GNP. This eighth post-World War II recession follows close on the abbreviated, but sharp, 1980 downturn. Even before the cyclically sensitive economies of Anderson and Muncie could recover from the last recession they have been drawn down into another.

A more meaningful perspective of the plight of these two SMSAs comes from tracing their paths through the previous two cyclical downturns.

The 1973-1975 recession was by far the most serious downturn since World War II and hit the Anderson-Muncie areas with especial severity. Employment dropped precipitously for Anderson and Muncie during the fourth quarter of 1974, as, to a lesser degree, it did for Indiana. The economies of both the nation and Indiana troughed in March 1975; Indiana's employment surpassed its fourth quarter 1974 total by the second quarter of 1976. Anderson, however, which overall experienced a substantially better recovery than Muncie, nevertheless shared the latter's misfortune and did not surpass fourth quarter 1974 employment totals until the second quarter of 1977–one year after the state.

What accounts for the differing experiences?

Durable goods manufacturing, concentrated in Anderson's Guide and Delco Remy divisions,

constituted 46% of Anderson's employed labor force in first quarter 1974. Durable goods manufacturing had declined by over 12% by the end of the first quarter of 1975, but still remained 4% below the 1974 total by second quarter 1977. Thus the recovery of the Anderson employment came partially from sources other than the then-thriving auto industry—to wit, modest increases in finance, insurance, real estate, retail and wholesale trade and services. In part, of course, the deficiency in durable goods employment reflected the exporting of Anderson jobs to new GM plants in the South. (See *IBR* Nov.-Dec. 1979 and June 1980.)

Muncie's share of employment in durable goods manufacturing in first quarter 1974 was 29%, roughly comparable to that of the state, but it was still 17% below the first quarter 1974 total by the second quarter 1977. However, given Muncie's much more diversified economy, it was able to realize far more substantial offsetting gains in wholesaling, services, government etc.

The long and the short of it is that durable goods manufacturing decreased substantially in both Muncie and Anderson during the cyclical downturn, but Anderson's durable goods recovery more significantly mirrored the brisk recovery of automobile sales following the cyclical trough of March 1975.

The ability of the nation's auto sector to weather OPEC's quadrupling of oil prices was partially facilitated by existing price controls on gasoline and fuel oil and an additional maze of formal controls thrust on the petroleum industry by Carter's newly created Department of Energy—all of which tended to insulate the consumer from much of the negative effect of the fourfold increase in world petroleum prices. Thus, petroleum consumption resumed its upward trend in the mid-seventies and the Big Three, after some hesitation, again generally opted to invest in the production and marketing of large gas guzzlers. The second OPEC oil crisis, following the Iranian revolution in early 1979, and the subsequent phased decontrol of petroleum prices, caused gasoline prices to double in the U.S. It also caused a seminal change in attitudes toward energy conservation, as the market mechanism achieved conservation goals that had previously eluded presidential admonishment. The auto industry was among the first energy-intensive industries to be affected as consumers opted for small, energy-efficient, foreign-made models that Detroit was not yet adequately equipped to produce. Sales of domestically-produced cars turned down in 1979 and plummeted to 6.5 million in 1980. They will total, approximately, an even more anemic 6.3 million in 1981. By this year foreign car sales had garnered 26% of the U.S. market.

These adverse changes are reflected in Anderson's employed labor force. A labor force of 57,000 in the second quarter of 1979 diminished to 49,000 by third quarter 1981—a 14% decline. Employment in durable goods production declined a whopping 25%. For the same time frame Muncie's employment was down 7% and durable goods employment declined 16%.

The pattern of layoffs at Anderson's Delco Remy and Guide divisions, began in July and August of 1979, less than two quarters after the second OPEC oil crisis, and escalated with the decline in auto sales. By July 1980, roughly one-third of the hourly workers of the two divisions were on layoff. Recalls commenced in the summer of 1980. Though Guide fared better than Delco Remy in this regard, the recovery was anemic when measured by past cyclical standards, as the previously cited employment figures attest.

Given the nation's economy, now in free-fall, and the abysmal reception of the 1982 auto models during the fourth quarter, the near-term outlook for the only partially recovered Anderson-Muncie economies can best be described as bleak. Additional layoffs can be expected at Delco Remy, Guide, and Muncie Chevrolet during the balance of the fourth quarter. The outlook for 1982 will be dependent, in large part, on the depth and duration

of the nation's recession. The very uncertain but crucial determinants of that depth and duration would appear to be the level of consumer spending during the holiday season and the extent of the decline in long-term interest rates and prices.

If one assumes a scenario, whereby real GNP declines 5% during fourth quarter 1981 and 2% during first quarter 1982, and domestic auto sales remain close to their present state of the doldrums well into the spring of 1982, then employment in the Muncie-Anderson area may continue its tortuous descent through first quarter 1982.

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